# The evolving NCEA

# Findings from the NZCER National Survey of Secondary Schools 2009

Rosemary Hipkins New Zealand Council for Educational Research



NEW ZEALAND COUNCIL FOR EDUCATIONAL RESEARCH

TE RŪNANGA O AOTEAROA MŌ TE RANGAHAU I TE MĀTAURANGA

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# **Executive summary**

This report has been compiled from data drawn from the three-yearly NZCER National Survey of Secondary Schools, with a particular focus on new data gathered in the 2009 survey round. Surveys for principals, teachers, trustees and parents all included a set of statements about the National Certificate of Educational Achievement (NCEA) that asked respondents to rate their views. These views about NCEA form the core of this report, with responses to other survey items included as relevant to the discussion.

Since our 2006 survey some significant changes have been made to NCEA structures and practices in three main areas. A process has been devised to allow the endorsement of NCEA certificates with an overall "merit" or "excellence" award for those students who achieved at these higher levels across a range of standards and subjects. Certificates were endorsed for the first time in late 2008, with the results released in early 2009—not long before the surveys reported here were conducted. Moderation processes have been revised to strengthen perceptions of their consistency and reliability. A large-scale exercise in aligning NCEA standards with *The New Zealand Curriculum* (Ministry of Education, 2007), released in its final form in late 2007, has been initiated, and was still underway at the time the survey was conducted. New questions in 2009 probed principal and teacher perceptions of these changes. We considered it too soon to ask trustees and parents about changes still in progress at the time of the survey, especially where those changes were not yet likely to be apparent in students' or the school's NCEA achievement patterns.

#### Increased levels of support for NCEA

Support for NCEA has steadily increased since 2003, for all four groups—principals, teachers, trustees and parents. Principal support, always high, was nearly unanimous in 2009. Over two-thirds of teachers now say they are supportive of NCEA. Teachers in their first and second years of teaching were more likely to be unsupportive of NCEA and to be unsure about recent changes to NCEA structures and practices.

We also found increases in the percentages of principals, teachers and trustees who agreed that NCEA is a credible qualification in the wider community and that it is a valuable record of student learning. Levels of parental agreement about credibility matters were broadly unchanged from 2006. Many parents are still unsure about their support for NCEA—and indeed about all aspects of NCEA that we investigated.

A desire to return to the previous system or to create a new one was never very high for principals and teachers, and has waned further in the past three years. Levels of parent and trustee support for further change have increased a little, but not the desire to return to the old system. A new question in 2009 found half the parents, and particularly those from deciles 9 and 10 schools, to be supportive of the proposition that schools should offer alternatives to NCEA such as Cambridge examinations or the Baccalaureate. There were low levels of support for this idea from the other three groups, and very few of the responding principals said their school offered Cambridge or Baccalaureate qualifications.

#### Addressing motivation issues

The endorsement of NCEA certificates with an overall "merit" or "excellence" award has met with widespread approval. Views are more mixed about the impact of endorsement on schools' ability to meet students' learning needs. While three-quarters of principals agree that certificate endorsement has motivated students to work harder, teachers are divided in their views and a third of them are unsure. Almost half the teachers are uncertain whether certificate endorsement has made it harder to meet the learning needs of some students, but a majority of principals disagree that this is the case. While not specifically linked to endorsement of NCEA certificates, levels of principal and teacher agreement that NCEA is motivating for high achievers have gone up, but there is lower agreement now that it motivates underachievers to do their best. Combining response patterns for the four different statements related to meeting students' learning needs, there is a perception that gains for high-ability students may have been achieved at the expense of those with the greatest learning needs.

Principals in deciles 1 and 2 schools were more equivocal than their peers in their support for certificate endorsement, and tended to be unsure about the likely impact on students' learning needs. By contrast, principals in deciles 9 and 10 schools were more likely to strongly agree that certificate endorsement motivates students to work harder and to strongly disagree that it makes it harder to meet students' learning needs.

Strong principal support for NCEA is found amongst those who also think that their school has an active role in providing, and guiding students in, ongoing learning pathways. Some of the same associations were found in the teacher responses, but the overall pattern was not as clear. We also found clear relationships between teachers' perceptions that today's students are harder to engage and their views about the NCEA. Teachers who are positive about NCEA in general are less likely to see student engagement as having become more of an issue in the past five years, and more likely to see NCEA as providing the flexibility to create a curriculum that meets their students' learning needs.

## Addressing the "standard" of standards

Moderation processes have recently been revised to strengthen perceptions of their consistency and reliability. Evidence of support for these changes and for recent work on firming up of standards is mixed. Changes intended to make external moderation more informative have gained approval from some teachers and principals, but not others. Many principals and teachers still perceive that there is too much variation in moderation feedback.

The tension New Zealand Qualifications Authority (NZQA) has recently identified between accessibility to NCEA achievement and the credibility of the qualification is reflected in principals' potentially contradictory responses to questions about the standards review. While most are supportive of other standards contributing to NCEA (e.g., those from Industry Training Organisations) just under half (44 percent) agree with the proposal to remove standards below curriculum Level 6. A third or more of the teachers are unsure about both these actions. As with certificate endorsement, the tightening of standards is seen to have mixed benefits—more able students might regain a competitive edge, but those more likely to benefit from the broadening of types of achievements NCEA can credential may lose ground. Principals and teachers in deciles 1 and 2 schools were more likely to disagree that standards below curriculum Level 6 should be eliminated from NCEA, whereas principals in deciles 9 and 10 schools were more likely to support the idea of eliminating standards below curriculum Level 6.

### Links between NCEA and The New Zealand Curriculum (NZC)

A large-scale exercise in aligning NCEA standards with *NZC*, released in its final form in late 2007, has been initiated, and was still underway at the time the survey was conducted. It seems unlikely that this recent and ongoing work contributed in any substantive way to the increased levels of support for NCEA we found. Assessment is still widely perceived by principals and teachers as driving the secondary school curriculum. Many parents and Board of Trustees (BOT) members are unsure whether NCEA does this. Innovation in assessment tasks could help link curriculum intentions to NCEA standards by broadening the types of learning that can be assessed (i.e., not just learning that can be demonstrated in pencil and paper tests). However, such innovation, while widely approved in principle, is not seen as a recent source of professional achievement by a majority of teachers.

There was limited agreement from principals, teachers, trustees or parents that NCEA gives students too much responsibility for their choices. Compared to 2006, levels of concern about the burden of responsibility NCEA choices place on students dropped for principals, teachers and trustees (most parents did not see this as an issue in 2006 or in 2009). However, very few teachers said they usually or often helped students develop NCEA assessment plans. Teachers who said they never co-created assessment plans with students were the most likely to say that assessment is driving the curriculum. By contrast, teachers who said they did co-create assessment plans with their students seemed to have taken this issue into their own control—they were also more likely

to disagree that assessment is driving the curriculum and to agree that NCEA gives them the freedom to design the curriculum they want.

There were some indications that the principals who were most supportive of NCEA are also curriculum innovators. They were more likely to say their school had initiated curriculum and pedagogical changes aligned with the directions signalled in *NZC*, and to hold the view that a breadth of learning experiences and multiple learning pathways can legitimately contribute to an NCEA qualification. Introducing curriculum and assessment innovations appears to be the province of the most experienced and confident teachers. Teachers who were most positive overall about NCEA were likely to be experienced teachers with high morale, often with leadership responsibilities at either middle or senior management level.

Those teachers who were most positive about NCEA were also more likely to report that they had been involved in a comprehensive exploration of the various components of *NZC* and to be enacting at least some of its new directions. They were less likely to see NCEA as a barrier to curriculum change and they tended to hold more positive views of today's students and their engagement in learning. They were also likely to be more positive about their own professional learning, and about the collaborative learning possibilities they experienced in interactions with their peers. They were more likely to be welcoming of community participation in determining curriculum and learning directions for the school.

### Where do parents now stand on NCEA?

Many parents are still unsure about all the aspects of NCEA we investigated. Parental uncertainty or doubt is related to the age of the parent's oldest child at the school. Once students are in their NCEA years, parental familiarity increases and many parents appear to become more supportive. A small number are strongly opposed to NCEA at this stage. Parents who were employed in the education sector were more likely to be supportive than those who were not.

Parents who were most positive about NCEA were happier about their child's learning, more engaged with what was happening at school and more proactive about seeking information and getting involved. The school was likely to be their first choice for their child and to be one they would recommend to others. By contrast, parents who expressed more concerns about NCEA were more likely to be concerned about a range of aspects of their child's learning and progress, including how information about progress was communicated to them by the school. There were indications that this anxiety could translate into a desire for more normative information—to see how their child compared with others nationally. This could be one factor in the popularity of certificate endorsement because it allows for at least some more differentiated comparison with the achievements of their child's peer group.

# 1. Introduction

This report has been compiled from data drawn from the three-yearly NZCER National Survey of Secondary Schools, with a particular focus on new data gathered in the 2009 survey round. The national surveys, funded by NZCER's Purchase Agreement with the Ministry of Education, are actually four surveys in one. There are separate surveys for principals, teachers, trustees and parents. On the whole, the surveys cover complementary, but not identical, questions. The core material for this report is made up of sets of Likert-scaled items<sup>1</sup> about NCEA that were identical in the four surveys, or nearly so. Many of these items have now been used in at least two survey rounds and one in all three (2003, 2006, 2009) allowing us to begin to report frequency changes that suggest perceptions of some issues and challenges have shifted over the years since NCEA was introduced.

### The context for this report

The NZCER National Survey of Schools began in 1989 with the intent of tracking the impact of the "Tomorrow's Schools" reforms. These periodic surveys have continued to focus on the impact of significant policy initiatives. A strength of this approach is that the impacts of policy changes on practice and perceptions can be tracked over time. Because the surveys are wide ranging in their content, policy impacts can be tracked via a range of threads and their dynamics examined.

The surveys were originally limited to primary schools. Expansion early in the new century to include a survey for secondary schools coincided with arguably the most significant recent policy initiative for secondary schools—the introduction of the National Certificate in Educational Achievement. NCEA is the school-exit qualification, nested within the seamless National Qualifications Framework (NQF) developed in the last decade of the 20th century. Its implementation has not been without challenges and these have been addressed by a series of rolling adjustments along the way, hence the title of this report which continues the national survey tradition by exploring the evolution of NCEA within the overall national policy context.

In a recent synthesis of research on five "first-generation"<sup>2</sup> NQFs, Raffe (2009) reported that nations are likely to fail in their objectives if they set out to impose transformative change in education by introducing an inflexible NQF structure. More flexible frameworks have a better chance of meeting their policy intent because flexibility allows them to attune to local conditions,

<sup>&</sup>lt;sup>1</sup> Statements that invite comment on a 5-point scale from strongly agree at one end to strongly disagree at the other.

<sup>&</sup>lt;sup>2</sup> Those that were the first to be introduced internationally.

with the capacity to evolve and adjust over time. New Zealand introduced one of the five "firstgeneration" NQFs discussed in Raffe's work and NCEA nests within that. Rolling adjustments since the last NCEA report (Hipkins, 2007) include all of the following.

**Certificate endorsement:** If a student gains a sufficient number of credits at merit or excellence level their NCEA can now be endorsed accordingly. Initially only credit totals were reported and this was widely perceived to be demotivating for more able students (Meyer, McClure, Walkey, McKenzie, & Weir, 2006; Meyer, McClure, Walkey, Weir, & McKenzie, 2009). Anecdotally it seemed that the endorsement process quickly met with widespread approval. However some teachers and schools expressed concern at a possible erosion of the original intent of NCEA to credential a wide range of types of learning with parity of esteem. This is a complex issue and the report attempts to untangle some of its threads.

**Realignment of standards with the new curriculum:** A new national curriculum framework for Years 1–13 (Ministry of Education, 2007) was introduced in 2007. The message that NCEA should be aligned with the curriculum framework is clear:

*The New Zealand Curriculum* provides the basis for the ongoing development of achievement standards and unit standards registered on the National Qualifications Framework, which are designed to lead to the award of qualifications in years 11–13. These include the National Certificate of Educational Achievement and other national certificates schools may choose to offer. (p. 41)

At the time of the survey the overall collection of achievement standards had been reviewed to create a draft outline of how each subject area might be assessed at NQF Levels 1, 2 and 3 (the subject frameworks) and work was underway on revising the Level 1 standards and assessment exemplar materials to this new plan. Because the survey also probed views about curriculum implementation, the report can discuss aspects of the interplay between NCEA and *NZC*. A separate curriculum report will follow. We expect to revisit this issue in the 2012 NZCER Secondary National Survey.

A review of the standards that can contribute to an NCEA award: One aspect of the standards review work entailed a revisiting of the use in NCEA of so-called "bottomless" Level 1 standards from elsewhere on the NQF. These standards are often set around curriculum levels 4 or 5, and used to credential achievement towards vocationally based national certificates. This practice has always been controversial, yet it has allowed considerable flexibility to create different learning pathways for students who need these. The report explores the dynamics of this change.

**Refining moderation procedures:** Work in refining the moderation process has been ongoing. It is not directly linked to the revision of the standards but has implications for the standards review if moderators revise their advice about the nature of evidence required to demonstrate achievement to a standard. We asked some questions about moderation in 2006, but expanded this focus in 2009 to reflect debates about consistency of teacher and moderator judgements with respect to both NCEA standards and curriculum levels.

## The structure of the report

Section 2 outlines the methodology followed for analysis of national survey data. Section 3 reports on support for NCEA and perceptions of its credibility. The areas of change outlined above are then addressed in three further thematic sections. These are followed by a further two sections that consider patterns of responses across the themes, with a final concluding section.

Table 1 shows the statements about NCEA to which we asked people to respond, and the report section that contains the frequency data for each statement. The full set of responses for each group can be found in Appendix A.

Table 1	The NCEA-related statements used in the surveys
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Statements (for all four groups unless otherwise indicated)
Section 3: Current perceptions of NCEA
I am supportive of NCEA
The NCEA is a credible qualification in the wider community
I think we should create another assessment system
I think it is important for the school to offer alternatives to NCEA (e.g., Cambridge, Baccalaureate)
I think we should return to the previous assessment system
The NCEA is a valuable record of student learning
Section 4: Addressing concerns about motivation
Endorsing NCEA certificates with excellence or merit was a worthwhile change to make
Endorsing NCEA certificates with excellence or merit has motivated my child (parent version)
Students have too much responsibility for their NCEA choices
For principals and teachers only
Certificate endorsement makes it harder to meet some students' learning needs
Certificate endorsement motivates students to work harder
The NCEA motivates underachieving students to do better

The NCEA motivates high-achieving students to do their best

#### Statements (for all four groups unless otherwise indicated)

#### Section 5: Aligning NCEA and The New Zealand Curriculum

#### For principals and teachers only

The NCEA gives us freedom to design our courses and programmes how we want

Assessment is driving the curriculum now, even at Years 9 and 10

NZC standards at Level 1 NCEA should not be below curriculum Level 6

Other standards (e.g., ITO) should continue to contribute to NCEA

For NCEA achievement standards, the actual standard being sought seems to have got harder in recent moderation rounds

A range of assessment methods can be valid for NCEA

#### For parents and trustees

NCEA has too much influence on the senior secondary curriculum

NCEA has too much influence on the Years 9 and 10 programme

#### Section 6: Learning from feedback

#### For principals and teachers only

Recent external moderation feedback has been more helpful than in the past for clarifying the standard needed in assessment tasks

Different moderators have very different views about whether work meets a standard

External moderation provides *teachers in the school* with valuable insights into the expected standards of achievement [the teacher version said "...provides *me* with ..."]

Moderation of assessments takes too much time

NCEA results are a valuable source of data when considering *changes to teaching* [teacher version = when considering *changes to the way I teach*]

NCEA class achievement data are used for teacher appraisal purposes in our school

I feel *the school* is under unfair pressure to boost students' NCEA achievements [teacher version = / feel under unfair pressure to boost *my* students' NCEA achievements]

#### Principals, teachers and trustees

NCEA "league tables" have an impact on our roll numbers

# 2. Research methodology

NZCER's national surveys are carried out at three-yearly intervals. There are four different surveys in any one set—for principals, teachers, trustees and parents. Use of at least some repeat questions allows changes over time to be documented and the reasons for these changes to be explored.

In addition to questions about the NCEA, secondary principals responding in 2009 were asked about: resources and staffing; curriculum, school programmes and initiatives; today's students; leadership of learning; relationships with other schools and with government agencies; engagement with parents/whānau and the wider school community; the BOT; their work as a principal; and their perceptions of issues ahead.

Themes in the 2009 secondary teachers' survey were: curriculum; learning to learn; NCEA; professional learning and support; today's students; engagement with parents/whānau and relationships with the school community; the BOT; and their perceptions of issues ahead. Where relevant, questions were the same as those asked of principals, with minor changes to reflect differing roles.

Trustees were asked about aspects of their understandings of and support for NCEA, as relevant to their role. Other themes included: their role as a trustee; funding and resourcing; board processes; principal appointment and appraisal; contact with parents and the community; community consultation; BOT capacity, achievements and issues; and the role of the Ministry of Education.

Parents were also asked about their understandings of and support for NCEA, as well as their perceptions of how well the school was meeting their child's needs, how "in touch" they felt they were able to be with school issues and decision making and the overall cost of schooling.

## The national survey sample

Appendix B sets out the characteristics of secondary schools nationwide and the characteristics of the 2009 responding schools. It shows that the responding principals, teachers, trustees and parents were broadly representative of all secondary schools. Appendix C documents response rates and describes the profile of each responding group.

## Analysis of the data

Five-point Likert scales (strongly agree, agree, neutral/not sure, disagree, strongly disagree) were provided for responses to the statements shown in Table 1 above. Some statements are repeated from the 2006 NZCER National Survey, allowing us to see any changes in response patterns. Where the same statement was given to all four groups their responses are reported in one graph for ease of comparison. The vertical midline of these graphs is positioned between agree and neutral/unsure responses to highlight the extent of agreement with each statement. Graphs are ordered with items to which there was greatest agreement at the top of the graph, and items to which there was greatest disagreement at the bottom of the graph. Note that some items need to be interpreted in reverse—that is, disagreement actually signals support for NCEA.

#### **Cross-tabulations**

We cross-tabulated a number of other variables from the survey with all the NCEA item responses and results are reported in Section 7. Note that item categories were sometimes collapsed for this analysis, as summarised in Appendix D. Cross-tabulations between other items are also reported in the text as relevant. Only differences significant at the p < 0.05 level are included. At the p <0.05 level, a 1-in-20 chance exists that a difference or relationship as large as that observed could have arisen by chance in random samples. Tests of significance do not imply causal relationships, simply statistical association. Although comparison of proportions alone can seem to show differences, these differences may not be statistically significant once the size of the group is taken into account.

#### Cluster analysis

We repeated the approach used for further analysis undertaken with the 2006 NZCER Secondary National Survey. Responses to the individual NCEA items were used to define clusters of individuals with common patterns of response. To do this we used a cluster analysis process that employed a distance algorithm appropriate to ordinal data. The principal and teacher analyses yielded three clusters—those who were very positive, those who were positive but wanting improvements and those who held other views. Parent and trustee responses yielded two clusters—very positive and other views. This approach allowed us to see whether the groups (clusters) of people defined by their shared opinions about NCEA also shared opinions on other things we asked about.

# 3. Current perceptions of NCEA

Figure 1 shows responses to the statement *I am supportive of NCEA*. There was a near unanimous positive response from principals, with 71 percent *strongly* agreeing with this statement. Just over two-thirds of the teachers and trustees also agreed or strongly agreed with this statement. As in 2006, parents were the least positively supportive group, but 39 percent were either neutral or not sure, or did not comment. It seems that many parents still do not feel well informed about NCEA, an issue we reported when the 2006 survey data were analysed (Hipkins, 2007).

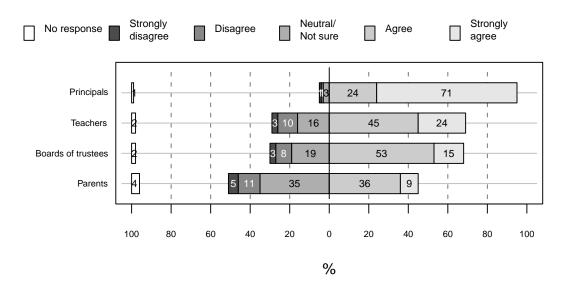


Figure 1 Responses to statement I am supportive of NCEA

This item has now been used in all three NZCER National Surveys of Secondary Schools. The next table tracks trends in support for NCEA, beginning with 2003 when it was still very new. In 2006 there was a dip in parental and teacher support, but overall we can see modest but steady increases in levels of support as people have got to grips with the change and the NCEA itself has evolved, both in structure and in practice.

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)

Table 2 Changes in support for NCEA 2003–9

#### Perceptions of the credibility of NCEA as a qualification

Levels of personal support for NCEA could have increased if it is now more widely seen as a credible school leaving qualification where previously there were lingering doubts. This is especially important when the information will be used competitively—as in gaining employment or a place in a tertiary study course. The comparative ranking of a normative assessment system is widely understood because most people experience it at some stage. By contrast, standards-based judgements were new to most people at the inception of NCEA and perhaps are still unfamiliar to many in the wider community. As the next figure shows, when considering how the wider community might perceive the credibility of NCEA, principals have more confidence in the qualification than any of the other groups. While more agree than disagree, around a third of teachers, trustees and parents are unsure.

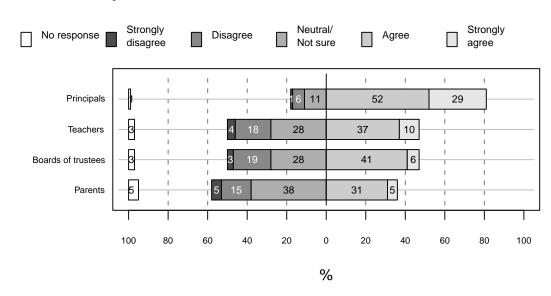


Figure 2 **Responses to statement** *The NCEA is a credible qualification in the wider community* 

A comparison of 2006 and 2009 responses shows that greater numbers of principals and teachers now perceive that NCEA is afforded credibility by the wider community. Fewer principals were uncertain in 2009 (11 percent, compared to 39 percent in 2006) or in active disagreement with the statement (7 percent, compared to 19 percent in 2006). Similarly, fewer teachers were uncertain in 2009 (28 percent, compared to 38 percent in 2006) or in active disagreement (22 percent, compared to 33 percent in 2006). There were modest increases in the numbers of parents and trustees who said the NCEA was credible but these response patterns continued to be characterised by high levels of uncertainty (39 percent of parents in 2006 and 36 percent in 2009; 30 percent of trustees in 2006 and 28 percent in 2009).

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)

Table 3 Perceptions of the credibility of NCEA (2006 and 2009)

## The value of NCEA as a record of learning

In the early years of NCEA, some parents found it hard to decipher the meaning of their child's Record of Learning (Wylie, Hipkins, & Hodgen, 2009). Parents and students alike could be unsure how to create a "point of difference" when they needed to present achievements in the best possible light (see, for example, Hipkins, Vaughan, Beals, Ferral, & Gardiner, 2005). Does the national survey provide any evidence that understanding and acceptance of NCEA's ability to deliver meaningful and valued information about students' achievements in their senior secondary school years has increased? We again asked all groups to respond to the statement *The NCEA is a valuable record of student learning*. As the next figure shows, most principals and more than half the teachers and trustees agree with this statement, but almost as many parents are unsure as agree. The results are notable for the somewhat higher numbers of trustees and teachers who agree with this statement than agree about credibility in the wider community (18 and 13 percent more respectively). This difference suggests that, at least for some respondents, doubts about NCEA's credibility are not personal but rather linked to how they think *other* people see the qualification.

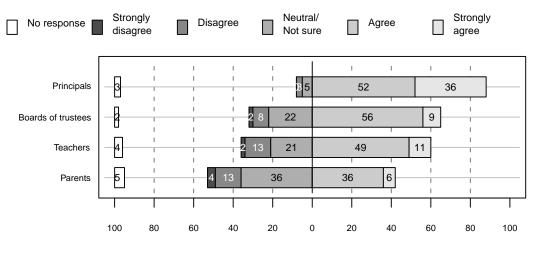


Figure 3 Responses to statement The NCEA is a valuable record of student learning



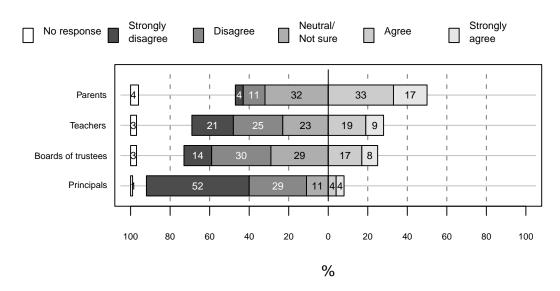
The next table shows a continuation of the pattern of higher percentages of respondents reporting positive perceptions of an aspect of NCEA in 2009 compared to 2006, particularly teachers. And again, parents remain unsure (32 percent in 2006 and 36 percent in 2009).

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)

Table 4 Perceptions of the value of NCEA as a record of learning (2006 and 2009)

## Should the assessment system be changed?

In the three years since the last NZCER National Survey of Secondary Schools there has been considerable media comment about schools that opt out of NCEA, offering at least some of their students the chance to gain qualifications from either the Cambridge examinations or the International Baccalaureate. This is often explained as a marketing strategy, designed to give schools a competitive edge by putting in place "superior" options to NCEA. We asked all four groups to respond to the statement: *I think it is important for the school to offer alternatives to* NCEA (e.g., Cambridge, Baccalaureate). The next figure shows the pattern of responses. Over half the principals were in *strong* disagreement and just 8 percent of them agreed. Notice, however, that half the parents agreed or strongly agreed. Only the statement about whether certificate endorsement was a worthwhile change (Section 4) elicited higher levels of agreement from this group. However, as for so many other aspects of NCEA, a third of the parents are unsure.



### Figure 4 Responses to statement *I think it is important for the school to offer alternatives* to NCEA (e.g., Cambridge, Baccalaureate)

Probing the relatively high level of parental agreement (both in comparison to their other responses, and in comparison to the other three groups) we cross-tabulated their responses to this item with all their other NCEA-related responses. As you would expect, parents who were generally more positive about NCEA were likely to be in the 15 percent who disagreed that alternatives of NCEA should be offered. Parents who were generally negative about NCEA were more likely to strongly agree with this statement. As for so much else about NCEA, parents who were unsure about other aspects could also be unsure about this. Perhaps the most interesting group are those who were unsure about other aspects but held a view about this statement. They were more likely to agree than to disagree that the school should offer alternative qualifications—that is, the inclination of some parents, if uncertain about NCEA more generally, was to agree that there should be other options.

Principals were also asked whether their school already offered either qualification, or was considering doing so. The next table shows the results.

		Principal responses (n=187)		
	Already offer %	Considering offering %	No—don't offer %	No response %
Cambridge examinations	7	1	92	1
International Baccalaureate	1	1	96	2

Table 5 Numbers of secondary schools offering alternative qualifications

Note: Numbers many not add to 100 because of rounding.

As we might expect, most principals who disagreed that it is important for the school to offer alternatives to NCEA were not themselves offering either of these alternatives, and those who did

offer them mostly thought it was important to do so. However, three principals who disagreed with this statement did say their schools offered Cambridge examinations, as did two who were unsure.

#### Support for some other system

While active support for the International Baccalaureate and Cambridge qualifications is not high except among parents, the possibility remains that some other type of change might be seen as desirable. As in 2006, we asked all four groups to comment on two future-scenario statements concerning the continued acceptance and use of NCEA as a national qualification: *I think we should create another assessment system*; and *I think we should return to the previous assessment system*. The next two sets of figures and tables show the results. Both sets of responses are again characterised by low levels of agreement and high levels of uncertainty among parents.

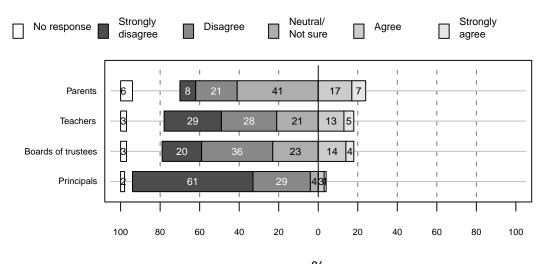
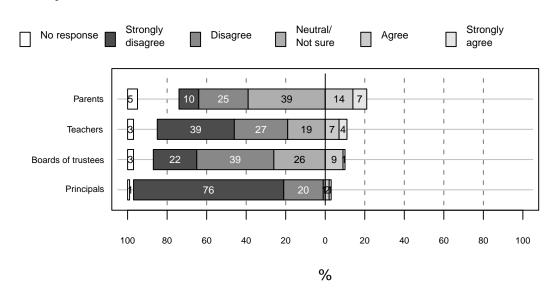


Figure 5 Responses to statement I think we should create another assessment system

<sup>%</sup> 



# Figure 6 Responses to statement *I think we should return to the previous assessment* system

Parents were more likely than any other group to express active support for change (24 percent for creating a new system, 21 percent for returning to the previous system). Cross-tabulations revealed these to be the same parents by and large. If they agreed with one of these statements, they also agreed with the other.

A comparison of the 2006 and 2009 data shows an interesting split in patterns of responses of principals and teachers, compared with those of trustees and parents. Reflecting their growing confidence in NCEA, frequency of principal and teacher support for either type of further change has dropped from an already low base in 2006. However, increased percentages of both trustees and parents, albeit a minority, would like to see more change (but not a return to the previous system). A caution when weighing the import of this trend is that levels of uncertainty in these two groups continue to outweigh levels of agreement that change is needed. In regard to designing a new system, 35 percent of trustees were unsure in 2006 and 36 percent in 2009; 41 percent of parents were unsure in both surveys. In regard to returning to the old system, 27 percent of trustees were unsure in 2006 and 26 percent in 2009; 39 percent of parents were unsure in both surveys.

Table 6 Desire to create another assessment system (2006 and 2005	Table 6	Desire to create another assessment sys	stem (2006 ar	d 2009)
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I think we should create another assessment system (agree/strongly agree)	Principals	Teachers	Trustees	Parents
2006 responses	10% (n=194)	27% (n=818)	16% (n=278)	13% (n=708)
2009 responses	4% (n=187)	18% (n=870)	28% (n=266)	25% (n=1,877)

I think we should return to the previous assessment system (agree/strongly agree)	Principals	Teachers	Trustees	Parents
2006 responses	5% (n=194)	17% (n=818)	14% (n=278)	23% (n=708)
2009 responses	3% (n=187)	11% (n=870)	10% (n=266)	21% (n=1,877)

#### Table 7 Desire to return to the previous system (2006 and 2009)

## **Concluding comment**

The patterns of responses reported in this section suggest an overall strengthening of perceptions that NCEA is a credible qualification. A caveat to this is the continuing high levels of uncertainty amongst parents and trustees.

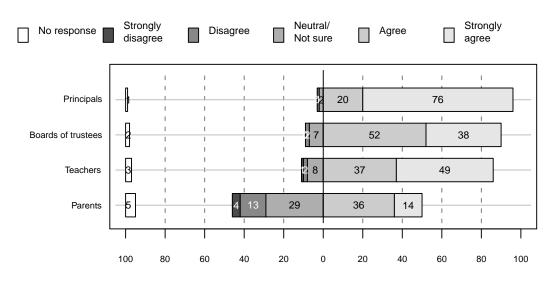
We could attribute this pattern of responses to growing familiarity with NCEA—it is no longer new and novel. This may be the case for teachers, and later in the report we will see that increased familiarity does tend to increase support among parents. However, continuing high levels of parental uncertainty *before* their children reach the NCEA years (see Section 7) suggest that the wider community from which parents are drawn may be no more familiar now with NCEA than they were three years ago. The differences between overall levels of teachers' *personal* support for NCEA and the lower frequency of their perceptions of *public* support would also support this interpretation.

Increased frequencies of perceptions of credibility could be associated with the introduction of certificate endorsement, which potentially brings a more competitive element to NCEA. Competitive sorting is a familiar feature of assessment and this possible association is supported by the patterns of responses discussed in next section.

# 4. Addressing concerns about motivation

The impact of NCEA on student motivation has been a vexed issue ever since its inception. In response to research that suggested NCEA has been demotivating, particularly for more able students (Meyer et al., 2006; Meyer et al., 2009) endorsement of the NCEA certificate if a student gained a sufficient number of credits at merit or excellence level has been introduced. This change was specifically intended to encourage students to work harder and make their best effort. Anecdotally it seemed that the endorsement process quickly met with widespread approval. However, some teachers and schools expressed concern at a possible erosion of the original intent of NCEA to credential a wide range of types of learning with parity of esteem. Unit standards, widely used to assess nontraditional courses, have up until now been awarded at "achieve" level only and thus credits gained from them cannot currently count towards certificate endorsement. The concern was that the change would consolidate the already apparent two-tier nature of pathways to NCEA (as reported in Hipkins et al., 2005) making it harder for schools to guide lower achieving students into courses that appropriately met their learning needs. Against this background, the 2009 National Survey investigated the level of approval for the endorsement change and its ramifications.

The next figure reports reactions to the statement: *Endorsing NCEA certificates with excellence or merit was a worthwhile change to make* (principals, teachers and trustees). Note that parents were provided a slightly modified statement: *Endorsing NCEA certificates with excellence or merit* has motivated my child.





%

There is clearly emphatic support for the change from principals, teachers and trustees. Thus it seems reasonable to assume that this change has been an important contributor to the increased levels of support for NCEA reported in Section 3. As for so many aspects of NCEA, nearly a third of parents (29 percent) were unsure if this was a worthwhile change to make, but half of them did support the change.

As we might anticipate, the subgroups of principals, teachers, trustees and parents who *strongly* agreed certificate endorsement had been worthwhile were also more likely to strongly agree that they were supportive of NCEA, that it provides a valuable record of student learning and is credible in the wider community. These principals and teachers also agreed that it motivates high achievers to do their best. The teachers (but not principals) who strongly agreed certificate endorsement had been worthwhile were also more likely to agree that NCEA motivates underachievers to do their best, gives the school freedom of curriculum design, that certificate endorsement has motivated students to work harder, that moderation feedback gives valuable insights into students' learning and that students' results are a valuable source of data for making changes to teaching.

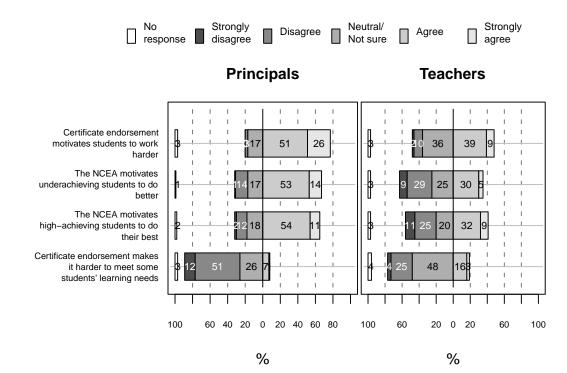
In view of this strong association between support for certificate endorsement and recognition of its potential for making a positive impact on learning more generally, it is noteworthy that 39 percent of the teachers who strongly agreed that certificate endorsement was worthwhile were not sure if endorsement had made it harder to meet students' learning needs, and almost as many disagreed (42 percent) as were unsure. The next set of responses probes this issue more deeply.

### Motivating students with differing learning needs

We next report on four statements that probe NCEA's impact on the engagement of different groups of students in learning. Only principals and teachers were asked to respond to these items, since they are the people best placed to judge the impact of endorsement and to comment on the ability to meet students' learning needs more generally.

As the next figure shows the high levels of approval of endorsement per se mask a more complex set of views when impacts on actual learning are taken into account. While many principals agreed that certificate endorsement has motivated students to work harder, a third of the teachers were unsure and 12 percent actively disagreed with this statement. The pattern of responses to the item *Certificate endorsement has made it harder to meet some students' learning needs* should be read in reverse. More than two-thirds of principals disagreed (a positive response) but nearly half the teachers were unsure. For both principals and teachers there was little active agreement with this statement, but it does again seem, at least for teachers, there are high levels of uncertainty. The other two statements are repeated from the 2006 survey and are about NCEA more generally. Again we see high levels of support from principals but more divided views from teachers. Note that these statements make no mention of certificate endorsement, which was introduced after

2006, but it is likely to have contributed to the 2009 responses and the changes over time shown in the next two tables.



#### Figure 8 Impact of NCEA on meeting students' learning needs

#### Table 8 Motivation of underachieving students (2006 and 2009)

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)

#### Table 9 Motivation of high-achieving students (2006 and 2009)

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)

Tables 8 and 9 show lower levels of support in 2009 for the proposition that NCEA is motivating for lower achieving students, combined with marked increases in support for the perception that it motivates higher achieving students to do their best. How might these shifts in levels of agreement be related to the responses to certificate endorsement reported above? Compared to the

broad agreement that certificate endorsement was a worthwhile change, we see more equivocal responses of some teachers to the specific statements about its impact on motivation and on meeting students' learning needs. Combining response patterns for all four statements, these differences point to a perception among some education professionals that motivation gains for high achievers may have been achieved at the expense of motivation for those with the greatest learning needs. However, since nearly half the teachers were uncertain about the impact of certificate endorsement on meeting learning needs, the jury is evidently still out.

The original intent of NCEA was to credential a wider range of types of learning with parity of esteem. At present the unit standards that are typically used to assess nontraditional areas of learning are only awarded at the achieve level and so cannot contribute to certificate endorsement, thereby skewing the "competition" in favour of more academically inclined students. However, ongoing finetuning changes include the reshaping of some widely used unit standards to include merit and, where appropriate, excellence levels. These changes may well help redress this balance. We should be able to investigate their impact at the time of the next NZCER National Survey of Secondary Schools in 2012.

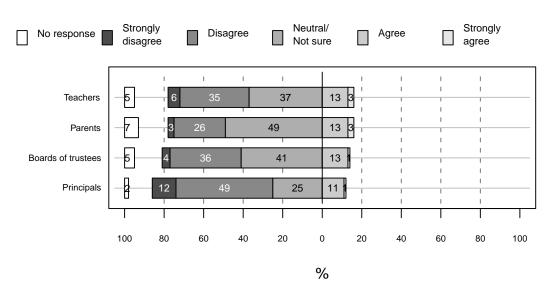
Another concern might be that the perceived increase in motivation relies heavily on the extrinsic reward of endorsement whereas the *NZC* focus on *learning to learn* would suggest that fostering intrinsic motivation is as important, if not more so, for so-called "twenty-first century" learners.<sup>3</sup> Then again, the *result* of the assessment, in the form of an NCEA award, is not the only aspect of the qualification that potentially impacts on motivation. This is a complex issue. With this in mind, we next explore another controversial element of NCEA—the ability of students to make choices that personalise the qualification to their own needs and interests.

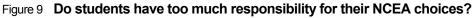
### Engaging students by offering greater choice

There are two broad areas to explore in relation to student choice: the ability students now have to avoid some assessments if they perceive they do not need or want the credits that would accrue; and the opening up of a wider range of types of courses, because schools can selectively mix standards to create different learning pathways for students with different needs. Both could potentially make a difference to motivation. Avoidance of assessments can be positive or negative, depending on the reasons. For example, NZCER's earlier research suggests that some students use this strategy to actively manage work pressures, prioritising assessment in the subjects of most perceived value to them. Then again, some might avoid assessments in areas where they do not expect to gain the credits, or do not want to put in the effort (Hipkins et al., 2005; Wylie et al., 2009).

<sup>&</sup>lt;sup>3</sup> *Learning to learn* is one of eight principles for *NZC*, and the principles are described as underpinning all curriculum decision making. Further, the high-level vision statement says that students should be educated to become actively involved, confident, connected lifelong learners.

In 2006 we reported mixed views about whether or not it was a good thing that NCEA affords greater potential for students to make individual choices about attempting specific assessments (Hipkins, 2007). We found levels of uncertainty ranging from a quarter of the principals to well over a third of teachers and parents, but fewer who thought students did have too much responsibility for their NCEA choices. As the next figure shows, this uncertainty has not yet been resolved.





The next table compares 2006 and 2009 levels of agreement that NCEA offers too much choice. While principal and parent views are relatively unchanged (few of them agreed in 2006) both teachers and trustees showed markedly lower levels of agreement—it seems they are now less likely to see this as an issue.

Table 10 Perceptions of responsibility given to students to manage own assessments (2006 and 2009)

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=1,877)

For teachers, this lower level of concern could have several meanings. Our earlier research suggests they might have come to accept that students are not especially likely to skip NCEA internal assessments<sup>4</sup> and hence become more relaxed about the possibility. Alternatively, they

<sup>&</sup>lt;sup>4</sup> With a few notable exceptions such making a speech in English (Hipkins et al., 2005).

might see that they have a role to play in supporting students to make good choices. However, we asked about the extent to which teachers do help students make choices within the context of an overall NCEA assessment plan<sup>5</sup> and found that this practice is relatively uncommon as yet. This item was one of a set of statements about teaching practices that can foster a learning-to-learn orientation.<sup>6</sup> Of this item set, only two other teacher practices were as uncommon—involvement in setting assessment tasks (66 percent never involved) and students taking part in e-learning conversations (60 percent never involved). By contrast just 11 percent of teachers said they never/almost never involved their students in individual goal setting.

Students co-create their NCEA plan	Teacher responses (n=780) %
Most of the time	3
Quite often	7
Sometimes	20
Never/almost never	64
No response	6

Table 11 Extent to which students and teachers co-create NCEA plans

#### Choosing courses

As well as making choices about whether to attempt assessments for specific standards, students face a wider range of course choices than in the past because the modular design of NCEA allows schools the flexibility to mix and match standards to create different courses, even within one subject. School timetable structures often create "learning pathways" that cluster courses intended for students of similar interests and abilities, so that the choice of one specific course (e.g., the type of mathematics attempted for NCEA Level 1) could also determine which other types of courses will fit that students' overall subject mix. However, research from the Starpath programme at Auckland University has highlighted the likelihood of relative disadvantage for students from low-decile schools, and specifically Māori and Pasifika students, if they do not understand the importance of choosing course combinations that keep further learning pathways open (Madjar, McKinley, Jensen, & van der Merwe, 2009). Another Starpath project has found benefits for student learning and achievement when the school takes active steps to involve parents in a supportive decision-making network where those with the necessary expertise can help students and parents understand the consequences of the decisions they make

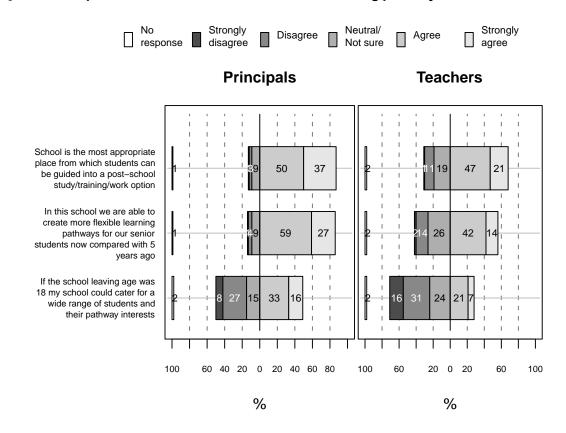
<sup>&</sup>lt;sup>5</sup> Such a plan would typically assist a student to look at their overall study and learning pathway goals, with an eye to both present achievement and likely future learning. Poor choices can restrict future study options (for example, if the credits gained at NCEA Level 3 are not distributed appropriately across "approved subjects" a student might not gain University Entrance even though they hope to study at university) or prevent the student gaining an award at all (for example, by failing to gain sufficient literacy and numeracy credits as required for a Level 1 NCEA award).

<sup>&</sup>lt;sup>6</sup> For example, encouraging self- and peer assessment and setting personal learning goals.

(McKinley et. al., 2009). Given ongoing high levels of parental uncertainty about NCEA, reported in the previous section, and the relative rarity of opportunities offered to students to make carefully scaffolded choices in individual classes (reported above) other schools might consider more proactive support for students when they make "pathway" choices.

In 2009 we added a new bank of items to the principal and teacher surveys to probe their perceptions about "today's students". Three items related to the school's ability to guide students into ongoing learning pathways appropriate to their needs. The next graph compares principal and teacher responses to these items.

As Figure 10 shows, most principals agreed that the school could now provide more flexible learning pathways than was the case five years ago, and they saw it as their role to guide students from these pathways to further options beyond school. Around two-thirds of teachers also agreed with both statements, but a greater percentage of them were uncertain. Principals were more equivocal about their ability to provide for a wide range of students if the leaving age was raised to 18 and almost half the teachers opposed this suggestion (although a third of them were not sure).



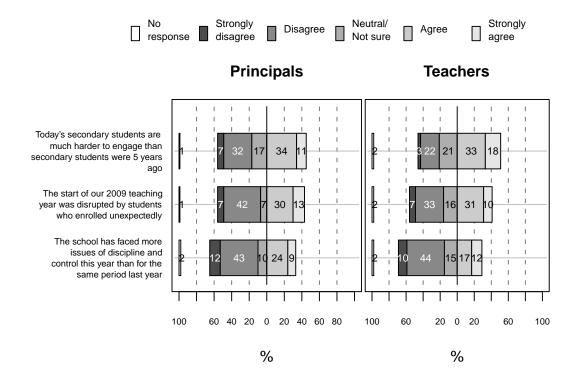
#### Figure 10 Principal and teacher views about students' learning pathways

Principals who agreed that school was the most appropriate place from which to guide students into post-school options were also more likely to *strongly* agree they were supportive of NCEA. Agreement about the appropriateness of pathways guidance was also associated with agreement

that NCEA is a credible qualification, provides a valuable record of student learning, motivates both high and low achievers, gives the school the freedom to design the curriculum they want, and that other standards should contribute to NCEA; and disagreement that we should make another system, return to the old system or offer alternatives to NCEA. The overall pattern here is one of strong support for NCEA being associated with a sense that the school has an active role in providing and guiding students in ongoing learning pathways. Some of the same associations were found in the teacher responses, but the overall pattern was not as clear.

# Views of student engagement (not necessarily specific to NCEA)

Two of the items about "today's students" probed principal and teacher views about whether student engagement has generally become more of an issue in the last five years. NCEA is one influence in the mix, at least for senior students, but how much does engagement actually loom as a *recent* issue for secondary school professionals? Responses to these items are shown in the next figure. Notice that around half the teachers and principals did indeed perceive that today's students are harder to engage, compared to students just half a decade ago.



#### Figure 11 Principal and teacher views about "today's students"

We asked about the extent of disruption to the start of the 2009 year because of widespread anecdotal accounts that many students who might otherwise have left school for paid employment had returned to school when they failed to find employment in a time of recession. This

phenomenon was seen to be an issue by just over 40 percent of both principals and teachers. Although there were slightly lower levels of agreement from both groups that discipline issues had got worse in 2009, there was a relationship between responses these two items. Those principals and teachers who agreed the start of the school year had been disrupted by returning students were also more likely to agree that discipline issues were worse in 2009, compared to 2008. Since some returning students were at school for want of other options, the situation doubtless created engagement challenges for teachers, at least initially, in the 2009 year. There are, however, indications of different responses to this engagement challenge from different teachers.

We checked for relationships between teachers' perceptions that today's students are harder to engage and their views about the NCEA. Every item in the NCEA Likert set was found to be significantly associated with responses to the engagement item. The patterns of these associations show that teachers who are more positive about NCEA in general are also less likely to see student engagement as having become more of an issue in the last five years. There could be two ways of looking at this finding. We could hypothesise that these more positive teachers are simply less aware that students have changed and/or are generally more optimistic (they do tend to report higher morale). Alternatively it could be that they have accommodated to the changing nature of student engagement by making adjustments to their own practice. The pattern of responses suggests the latter explanation. To illustrate: teachers who disagreed that students are now harder to engage were more likely to strongly agree that NCEA gives them freedom to design the curriculum they want (see Section 5). They were also more likely to disagree that students have too much responsibility for NCEA choices. By contrast, teachers who agreed that today's students are harder to engage were also more likely to express the desire to create a new system or to return to the previous one.

A similar pattern exists in the relationship between responses to the item about co-creating assessment plans and the NCEA item set. While not all items in this pairing were significantly associated, those that were endorse the picture painted in the paragraph above. For example, the teachers who said students never created an assessment plan were the most likely to say that assessment is driving the curriculum now (see Section 6). By contrast, teachers who said they did create assessment plans with their students seemed to have taken this issue into their own control—they were also more likely to disagree that assessment is driving the curriculum now and to agree that NCEA gives them the freedom to design the curriculum they want.

# 5. Aligning NCEA and *The New Zealand Curriculum*

This section explores perceptions of the relationship between NCEA and the new curriculum. *NZC* is clear in its message about keeping assessment in its place:

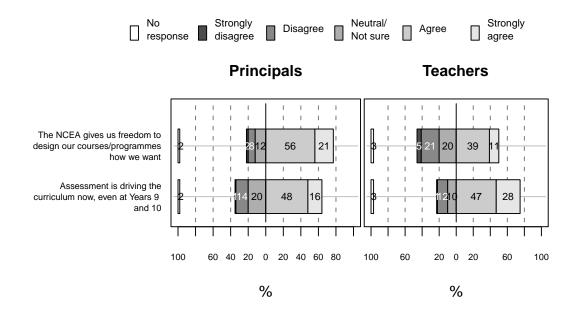
*The New Zealand Curriculum*, together with the Qualifications Framework, gives schools the flexibility to design and deliver programmes that will engage all students and offer them appropriate learning pathways. The flexibility of the qualifications system also allows schools to keep assessment to levels 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)

Previous national surveys have reported the widespread belief that NCEA acts as a curriculum constraint. Has this changed now that *NZC* is being implemented? Note the slight wording change made to one item for the 2009 survey: The NCEA gives us freedom to design our *courses and programmes* [2006 = the curriculum] how we want.

# NCEA as a curriculum constraint

The next figure shows the 2009 results for the principal and teacher statements about relationships between the curriculum and assessment. It is interesting that 77 percent of principals perceive that NCEA gives them freedom of curriculum design, yet 64 percent of them believe assessment is driving the curriculum. (We checked and there was no clear pattern of association between these two principal responses.)<sup>7</sup> Agreeing with both statements could be seen as contradictory, unless curriculum design cued thoughts of overall course/pathways design and the reference to assessment driving the curriculum cued thoughts of the taught curriculum—what happens in actual classrooms. This could also explain why three-quarters of principals, but only half the teachers, perceived they had greater curriculum freedom with NCEA. Not all teachers are involved in high-level course design but all of them are involved in teaching. The distinction between making course choices and having freedom in the classroom points to two separate dimensions in the above quote about curriculum design, taken directly from *NZC*.

<sup>&</sup>lt;sup>7</sup> Unlike the principals, there was an association between teachers' responses to these two statements. If they agreed NCEA gave them curriculum freedom they were more likely to disagree that assessment was driving the curriculum—and vice versa.



#### Figure 12 Principal and teacher views of links between NCEA and the curriculum

As the next two tables show, little has changed in the three years between surveys. While responses show a slight drop in percentages of principals and teachers who believe that assessment is driving the curriculum now, levels of agreement about the extent to which NCEA allows for curriculum innovation remain unchanged. Principals continue to be more likely to perceive such freedom than do teachers.

Table 12 Perceptions of freedom for curriculum	n innovation (2006 and 2009)
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NCEA gives us freedom to design the curriculum how we want (agree/strongly agree)	Principals	Teachers
2006 responses	77% (n=194)	41% (n=818)
2009 responses	77% (n=187)	41% (n=870)

#### Table 13 Perceptions of extent to which NCEA drives the curriculum (2006 and 2009)

Assessment is driving the curriculum now, even at Years 9 and 10 (agree/strongly agree)	Principals	Teachers
2006 responses	66% (n=194)	80% (n=818)
2009 responses	64% (n=187)	75% (n=870)

#### Parent and trustee responses

The pattern of responses in the next figure suggests that BOT members are somewhat more aware of the issue of NCEA's impact on the curriculum than are many parents, although responses from both groups are characterised by high levels of uncertainty. Note that nearly half the trustees

disagreed there would be a "trickle down" impact of NCEA on the curriculum students experience in Years 9 and 10. This does not appear to match the perceptions of teachers and principals, but since the latter were asked a more encompassing question (assessment driving *even at* Years 9 and 10) we cannot read too much into this difference.

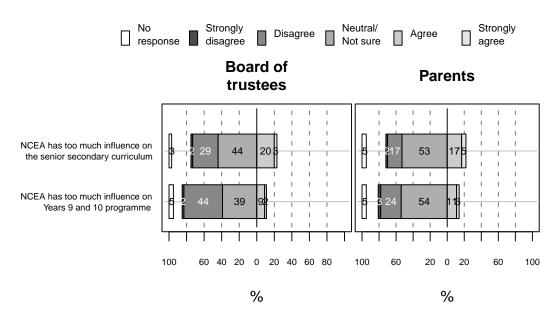
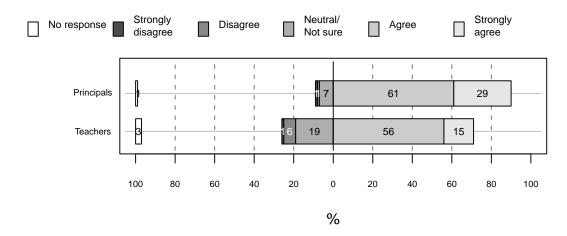


Figure 13 Trustee and parent views of links between NCEA and the curriculum

# Creating curriculum links through assessment innovation

An item added to the 2009 survey probed principal and teacher perceptions of the acceptability of varying assessment tasks and types. It is included in this section because this is a question with considerable curriculum implications. *NZC* includes a substantive section of advice on assessment, including that it should be "suited to purpose", in part by being "chosen to suit the nature of the learning being assessed" (p. 40). Only certain types of knowledge and skills can be assessed in traditional pen and paper tests and examinations and thus making innovative changes in assessment tasks could be linked to curriculum implementation, if schools or individual teachers choose to explore and develop this link. The next figure shows high levels of principal and teacher support for the proposition that *a range of assessment methods can be valid for NCEA*. Thus it does not seem that any hobbling effect NCEA may have on the curriculum is perceived as being a result of the *types* of assessment tasks that can be used.



#### Figure 14 Views about whether a range of assessment methods can be valid for NCEA

Since there seems to be very little opposition to the use of varied assessment tasks, we next seek evidence of increased levels of activity in designing innovative assessments. Do teachers simply agree in principle, or are they actively extending the scope of assessments in practice? This is an important question if what can be assessed is perceived as driving what can be taught.

An item bank near the end of the survey asked teachers to identify main achievements over the last three years. In 2009 just 36 percent of teachers said that innovation in assessment tasks was a main achievement, compared to 52 percent in 2006 and 46 percent in 2003. Developing the ability to design suitable tasks for standards-based assessment was a huge professional challenge for teachers when the NCEA was introduced and it may be that teachers have been turning their attention elsewhere more recently. A revision of the achievement standards to more clearly align them to *NZC* is underway and examples of innovative assessments are being developed as an adjunct to the process. It may be that we will see a renewed focus on this area in 2012 when the next NZCER National Survey takes place.

# Perceptions of "standards" in relation to NZC

The standards-review process, underway at the time of the 2009 NZCER National Survey, was charged with investigating the credit parity<sup>8</sup> of achievement standards from different curriculum areas and also the match between the achievements specified for various Level 1 standards and levels of achievement expected at Level 6 of *NZC*. This review identified a tension between *accessibility* to achievement for some students and *credibility* of the Level 1 NCEA (New Zealand Qualifications Authority, n.d.). The issue here is that some unit standards, especially those owned by Industry Training Organisations (ITOs) are set at nominal curriculum levels of 4 or 5. Yet

<sup>&</sup>lt;sup>8</sup> How much work is required per credit, and at what level of challenge.

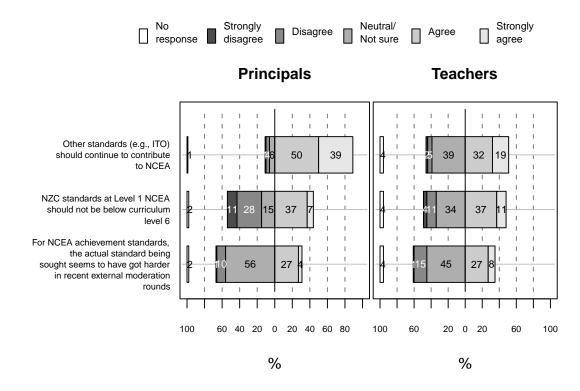
these standards can provide important early success for low-achieving students and hopefully keep them on learning pathways. As the NZQA document comments:

On the one hand it is desirable that a Standard or qualification, particularly at entry level, should be accessible so that as many learners as possible are able to establish a record of achievement, not be discouraged from undertaking further learning, and are able to bridge into further learning whether that be trades training or academic. On the other hand, a qualification must be perceived by the community to be credible; it should represent the learning outcomes that it purports to represent in a manner which is transparent and robust. In New Zealand's standards based system, achievement of credits at a NQF level should denote performance appropriate to the level specified. (New Zealand Qualifications Authority, n.d., p. 2)

How is this tension playing out in schools? The next figure shows principal and teacher perceptions about the issues the standards review must juggle.

First there is the issue of whether standards below Level 6 should continue to be allowed. Some principals and teachers appear to manage the tension described above by distinguishing between ITO standards and any standards linked to *NZC* (i.e., those that assess more traditional school subjects). While most principals agree the ITO standards should continue to be allowed, only 39 percent of them think that *NZC*-linked standards not matching Level 6 of the curriculum are acceptable (note that this is a reverse item—disagreement with the statement is support for standards below Level 6). It would appear that fewer teachers have resolved this tension, given the high levels of "not sure" responses to both statements. Just 15 percent of teachers actively support the continuation of below-Level 6 *NZC*-linked standards, compared to 48 percent who think they should not be allowed.

One way to change standards is to tighten up requirements for evidence of achievement. Such change is most easily driven by external moderation, which sends strong signals to teachers about what is acceptable. Note the high levels of uncertainty from both groups about whether or not this is already happening. We might expect principals to be unsure—they are not usually directly involved in processing moderation feedback. As we might also expect, faculty leaders who co-ordinate moderation for their teams were more likely to agree this change has taken place.



#### Figure 15 Principal and teacher views of issues related to standards reforms

## Concluding comment

This section reports on two potential contradictory patterns of responses, both of which reflect the tension between accessibility and credibility identified in the quote above taken from a standards-review document produced by NZQA. NCEA is seen as both driving the curriculum and affording freedom to design courses that meet students' learning needs. Since over-assessment can dominate learning processes, it is likely that some of this perceived impact of NCEA on the curriculum relates to frequency of assessment. In principle, there is little opposition to the use of innovative tasks that could potentially prevent a time-consuming separation between assessment and learning. Whether innovation takes place in practice is another matter and we will return to this question in 2012, after the completion of the standards review, with the associated design of NCEA task exemplars that are intended to model innovative assessment practice.

Just under half the principals and teachers think Level 1 NCEA standards should be set at curriculum Level 6, yet most of the principals, at least, also want standards such as those designed by ITOs (some of which are below curriculum Level 6) to continue to contribute credits to Level 1 NCEA awards. These are the standards that provide curriculum flexibility to design learning pathways that keep NCEA Level 1 accessible to struggling learners. It may be that we will also see some resolution of this dilemma when the new national curriculum, with its focus on learning to learn, and curriculum flexibility to meet local needs, has been fully implemented.

# 6. Learning from feedback

The NCEA report from the 2006 NZCER National Survey commented on the amount of professional effort and collective learning required to understand standards-based assessment and to develop a collective view of where standards actually reside (Hipkins, 2007). A standard can never be clearly and fully specified by words on a page. It resides in the collective constituted by: the formal standards definition and notes; the body of tasks used to assess the standard; the range of student work generated by those tasks; and the history of judgements that builds up in relation to how and why student work meets a standard, or does not. It will be evident that most of these sources can only be generated over a period of time and so shared professional knowledge about what constitutes the "standard" builds slowly but continuously.

When NCEA was first introduced teachers were encouraged to send in work at the boundaries between levels of achievement (not achieved, achieved, achieved with merit, achieved with excellence) so that they could check their growing understanding of the standard of work required for each level. This is only safe to do if moderation is perceived to have a *learning* purpose. If it is perceived to be predominantly for *accountability* (i.e., to check teachers have not made "mistakes") they are likely to play it safe by sending examples for moderation where they are more sure of their judgements. This squanders the learning opportunity and consolidates the view that incorrectly assigned levels of achievement are mistakes rather than matters of judgement.<sup>9</sup>

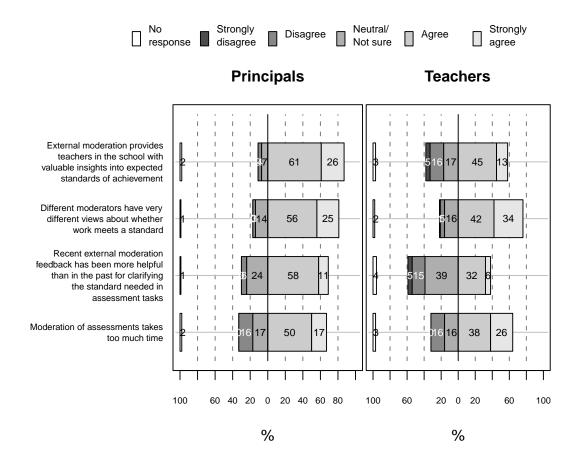
When the focus of media commentary on NCEA turned to reliability and fairness of teacher judgements NZQA responded by refining the moderation processes and appointed full-time moderators where previously this work was undertaken on a part-time basis by busy teachers. They have also instituted a system of random sampling of student work where previously teachers selected examples to submit. This section explores the impact of these changes, and the potential for teachers to learn from the feedback generated by their student results and the moderation of these.

# Moderation as a learning process

We asked some questions about moderation in 2006, but expanded this focus in 2009 to reflect debates about standards and curriculum levels. As the next figure shows, moderation continues to be seen as time consuming by around two-thirds of principals and teachers but many of them do agree that it provides valuable insights into expected standards of achievement, principals rather

<sup>&</sup>lt;sup>9</sup> Matters of judgement are inevitably involved in any assessment, but in traditional examinations they are likely to be hidden from the view of all except the markers and those who co-ordinate their work.

more so (87 percent) than teachers (58 percent). Principals (69 percent) also seem more aware than teachers (38 percent) of recent efforts to clarify judgements about where standards reside. As many teachers were unsure as agreed. Nevertheless, around three-quarters of both principals and teachers perceive that there is still too much variation between different moderators. (In 2006, when the item was less specific, 63 percent of teachers agreed that *NZQA feedback is often unpredictable*.)



#### Figure 16 Principal and teacher responses to moderation issues

Near the end of the survey teachers were asked to select from an item bank those things that they would most like to change in their work as a teacher. More than a quarter (29 percent) indicated they would like to have "more stability in moderation of assessments".

# Data-informed decision making

Moderation can support teachers to expand and refine their professional knowledge of the range of evidence that is appropriate to determine achievement at each level of a standard. These conversations inform *assessment* practice but they also have implications for *teaching and learning*, especially where students aspire to lift their performance with appropriate help and support. Aggregated NCEA results can also be used to inform ongoing teaching and learning decisions—if there is an aspect in which students do not achieve to the level anticipated, some adjustments to the teaching programme could be needed. The 2009 teacher survey included an item on the use of NCEA data as feedback for the purpose of adjusting learning for different students. Most principals (82 percent) and more than half the teachers (56 percent) agreed that NCEA results are a valuable source of data for making teaching changes.

Figure 17 also shows the extent to which teachers are expected to include NCEA results in their personal appraisal processes—just 21 percent of principals and 17 percent of teachers said that NCEA achievement data are used for appraisal purposes. (A third of teachers were unsure but presumably they would know if a transparent appraisal process was being followed!) There are two ways of looking at this pattern. We could see it as a good thing if results are used to sanction teachers whose students do not do well. However, we could also see this as a missed opportunity to acknowledge and document the professional learning that more than half the teachers and most principals say is already taking place when NCEA results are used to enrich and extend future learning.

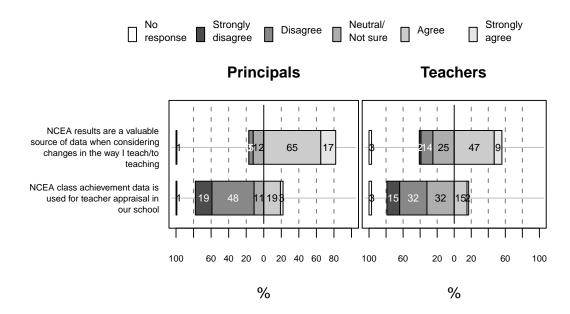


Figure 17 Perceptions of links between NCEA data and teachers' professional learning

One of the items teachers could select when identifying changes they would like to make to their work was "more advice when assessment results show gaps". Just 15 percent of teachers selected this item. There were significant associations between selecting this change and being in the first two years of teaching and/or having just satisfactory or poor morale.

# Achievement results and league tables

Since the 2006 survey the impetus to use NCEA results to make changes in teaching and learning that will lift student achievement has intensified. It is a pressure that plays out against a backdrop of increases in league table reporting of NCEA results. This means that equity issues related to the provision of appropriate learning opportunities become messily tangled with marketing issues related to wider public perceptions of the school, with all the media controversy that such reporting engenders. To probe views about these pressures, two new items were added to the surveys. The next figure shows responses to these. (Note that principals and teachers responded to both items but trustees were only asked about the impact of league tables on roll numbers.)

Principals are the group most concerned about, or perhaps aware of, the impact of league tables on roll numbers (51 percent of principals, 37 percent of teachers, 28 percent of trustees agreed or strongly agreed that league tables have impacted on roll numbers). Teacher and trustee responses are characterised by high levels of uncertainty about this. Twenty-two percent of principals and 32 percent of teachers said they felt under unfair pressure to boost NCEA results.

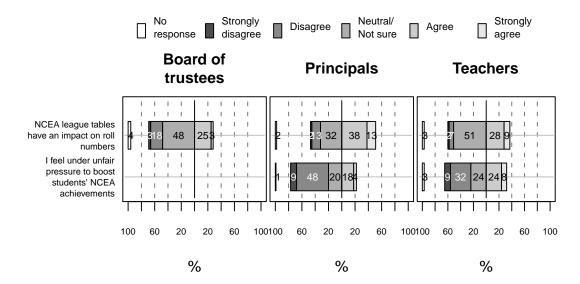


Figure 18 Perceptions of pressures from public reporting of NCEA results

There was a clear relationship between teachers' responses to these two items (but not in the principals' responses). Those teachers who agreed that league tables had impacted on roll numbers were more likely to say they felt under unfair pressure to boost NCEA results. This is a concern because this pressure could impact negatively on these teachers' ability to take risks and try new ways of working in their NCEA classes. Under pressure of scrutiny, they might be more likely to "game" the system in various ways (discouraging students from attempting standards that are a stretch for them; designing courses assessed by less demanding combinations of standards etc.).

# **Concluding comment**

It is encouraging to see that NCEA results are being used to make changes in teaching practice, even if the report cannot illuminate exactly how the implicated teacher learning unfolds and is supported, and in some cases linked to appraisal. Other research methods (e.g., case studies, action research, ethnographic studies) are likely to be more fruitful for untangling webs of connections between NCEA data patterns, curriculum/NCEA alignment and ongoing learning from moderation. What we can say is that for some teachers this appears to be risky territory. A third of them feel under unfair pressure to boost NCEA results. Three-quarters of them feel that moderation feedback gives mixed messages about where standards of achievement actually reside. In view of these risks, making changes with uncertain outcomes (for example, introducing curriculum innovations) is likely to be the province of only the most experienced and confident teachers. Indeed, as the next two sections make clear, those teachers who seem most firmly in control of the NCEA are likely to be experienced teachers with high morale.

# 7. Patterns of differences in responses

This section reports on the results of cross-tabulations of responses by the variables listed in Appendix D. The use of the phrase "more likely to" signals that the subgroup identified were more likely than other members of the whole group (e.g., all teachers or all parents) to make the response described. Note that these are *relative* rather than absolute differences. For any one difference, some of the identified subgroup would have given different responses and some members of the other subgroups would have responded as this subgroup did. Other subgroups might have tended to be less emphatic (e.g., choosing agree rather than strongly disagree), sometimes they were more likely to be unsure and sometimes there were genuinely opposing views. All these types of differences are described in this section.

We found fewer differences for principals and trustees than for parents and teachers. Those identified for principals and trustees mostly related to the variable of school decile and these patterns are reported first. No other school variables (size, location, school ownership) yielded noteworthy patterns of differences.

# **Decile-related differences**

In this analysis we look at differences at either end of the range of school deciles. Schools in the mid-decile range sometimes tend one way, sometimes the other. Differences in patterns of responses do suggest that NCEA issues and changes play out differently in high- and low-decile schools.

Some differences we found suggest that tension between credibility of the qualification and the aim of keeping learning pathways open for as many students as possible (Section 5) is more acutely felt in low-decile schools. Principals in deciles 1 and 2 schools were more equivocal than their peers in their support for certificate endorsement, and tended to be unsure about the likely impact on students' learning needs. Both principals and teachers in these schools were more likely to disagree that standards below curriculum Level 6 should be eliminated from NCEA. Teachers in the low-decile schools were also more likely to say they felt under unfair pressure to boost their students' NCEA achievements. In contrast to these responses, the ability of NCEA to keep learning pathways open for a wide range of students is likely to lie behind the following pattern of positive perceptions: teachers in deciles 1 and 2 schools were more likely to be strongly supportive of NCEA, to agree that it provides a valuable record of student learning and to perceive that it gives them more curriculum freedom; parents of students in deciles 1 and 2 schools were more likely to: be strongly supportive of NCEA; agree that it is seen as a credible

qualification in the wider community; and agree that it provides a valuable record of student learning.

Responses to recent NCEA changes seem to play out differently in high-decile schools. Principals in deciles 9 and 10 schools were more likely to strongly agree that certificate endorsement motivates students to work harder and to strongly disagree that endorsement makes it harder to meet students' learning needs. They were more likely to support the idea of eliminating standards below curriculum Level 6. Teachers in deciles 9 and 10 schools were more likely to want to reduce assessment workloads, yet also to disagree that they were under unfair pressure to boost students' NCEA achievements, or that students have too much responsibility for NCEA choices, and are harder to engage compared to students five years ago. Both teachers and parents from deciles 9 and 10 schools were more likely to agree that the school should offer alternative qualifications such as the Cambridge or Baccalaureate. Trustees in deciles 9 and 10 schools were more likely to disagree that NCEA is seen as a credible qualification in the wider community, and they had strong views either way about the impact of league tables on the school roll.

# Patterns of differences in the teacher data

Some of the patterns of differences we found in the teacher responses were very closely related. For example, patterns of responses by length of time in teaching were very similar to those for teacher role, doubtless because senior and faculty leaders are more likely to be experienced, longer serving teachers. Many of these responses made most sense in terms of role, so they are reported this way. The exception was teachers in their first two years of teaching. Patterns of differences between their responses and those of other classroom teachers made most sense in terms of their newness to the profession. Patterns of differences for teacher morale are also similar to those for role because teachers who were senior leaders were also more likely to say they had high or very high morale. However, many other teachers also said they had high or very high morale and so these patterns are reported separately from the role-related patterns. The picture that builds is one of an association between deep engagement in the profession and support for NCEA.

#### Differences related to teaching service and role

Senior leaders were relatively more likely than all other teachers to agree that: NCEA is a valuable record of student learning and a credible qualification in the wider community; certificate endorsement motivates students to work harder; NCEA motivates high-achieving students to do their best; "other" standards should contribute to NCEA (e.g., from other qualifications registered on the NQF); it is acceptable for some of these other standards to be below curriculum Level 6; NCEA gives their school the freedom to design the curriculum how they want; and that NCEA results provided a valuable source of data when considering changes in teaching. They were also relatively more likely to disagree that: the school should offer

alternatives to NCEA, or return to the previous system; certificate endorsement makes it harder to meet students' learning needs; today's students are harder to engage, compared to students five years ago; and the school is under unfair pressure to boost student achievement.

Senior leaders and faculty leaders often responded in similar ways. Together, they were more likely to be strongly supportive of NCEA and to say that: certificate endorsement was a worthwhile change to make; they quite often helped students create NCEA assessment plans; and a range of assessment methods can be valid for NCEA. These two groups were also more likely than classroom teachers and those in other teaching roles to disagree that we should create another assessment system.

As we might expect, given their administrative and team-leadership responsibilities for NCEA, faculty leaders tended to express the strongest views about moderation issues. They were likely to strongly agree that moderation of assessments takes too much time, that different moderators could hold different views about the standard of work submitted for moderation, and to identify more stability in the moderation of assessments as a change they would like to see in their work. However, they were also more likely to strongly agree that: recent moderation feedback had been more helpful than in the past; external moderation provided them with valuable insights into the expected standards of achievement; and that external moderation had recently begun demanding higher standards of student work. On the one hand they perceive inconsistency and a lot of work, yet on the other they are well aware of trends to tighten up moderation and make it more informative.

Teachers in their first two years of practice were likely to be unsure about whether they were supportive of NCEA or to say they were not supportive. They were more likely to be unsure how to respond to many of the NCEA statements in the survey, especially (not surprisingly) when these required them to make a then-and-now comparison. For example, they were more likely to be unsure whether: the school should offer alternatives to NCEA, create another assessment system or return to the previous one; certificate endorsement was a worthwhile change to make or that it made it harder to meet students' learning needs; moderation feedback was now more helpful than in the past; external moderation had recently begun demanding higher standards of student work; standards other than achievement standards should contribute to NCEA; or that a range of assessment methods can be valid for NCEA.

## Differences related to teachers' morale

Those teachers who said their morale was very good were more likely to also strongly agree that: they personally supported NCEA; NCEA is a credible qualification in the wider community and a valuable record of student learning; certificate endorsement was a worthwhile change to make; NCEA motivates high-achieving students to do their best; NCEA gives their school the freedom to design the curriculum how they want; and a range of assessment methods can be valid for NCEA. These teachers with very good morale were also more likely to disagree that: we should return to the previous assessment system; students have too much responsibility for NCEA choices; or are harder to engage, compared to students five years ago; and that the school was under unfair pressure to boost student achievement. Teachers with lower morale were more likely to say they wanted to reduce their workload, to agree that moderation of assessments takes too much time and that assessment is driving the curriculum. Whether low morale engenders negative responses to ongoing NCEA challenges, or these ongoing changes impact on morale if teachers are struggling to implement them is a moot point. Either way, there are evident challenges to be addressed.

#### Differences related to subjects taught

Teachers from two clusters—maths/science/computing and social science/arts/commerce—were more likely to disagree or strongly disagree that we should make another assessment system, although the maths/science/computing group was also somewhat overrepresented in the group who agreed, suggesting that views of teachers in these subjects are divided.

Teachers of technology, PE, health, careers or transition subjects were the most likely to agree that certificate endorsement makes it harder to meet students' learning needs and they were more likely to be equivocal about whether NCEA motivates low-achieving students to do better in their learning. They were more likely to agree that standards from other NQF qualifications should be able to contribute to NCEA and to identify the design of new NCEA assessments as a main personal professional achievement in the last three years. Higher numbers of unit standards are used in some of these subjects, many of them drawn from alternative qualifications. Unless they are rewritten to include merit and excellence levels, unit standards are not eligible to count towards certificate endorsement. Thus the trends just outlined could collectively be seen as indications of concern about the impact of endorsement and/or the standards-review process on these teachers' ability to offer innovative courses that students will value and hence want to work hard in.

Teachers from two groups of subjects (social science/arts/commerce; and technology/health/PE/ careers/transition) were more likely to strongly agree that NCEA has afforded them curriculum freedom. The English/language teachers were least likely to agree with this statement. Teachers from the social science/arts/commerce and technology/health/PE/careers/transition groups were also more likely to say they quite often helped students create an NCEA assessment plan, whereas teachers in the mathematics/science/computing group were likely to say they never or almost never did this. It might be that teachers of "gatekeeper" subjects such as English, mathematics and science have the high stakes for making assessment choices that keep pathways open to tertiary learning in mind if they attempt to control students' combinations of standards, via course design and/or choices students make about which assessments they will attempt.

# Patterns of differences in the parent responses

The previous sections have reported the continuing pattern of higher levels of don't know/not sure responses from parents, compared to principals, teachers and trustees. The differences reported next point strongly to their child's experience of NCEA being the time at which many parents begin to get to grips with the system for the first time, and many do seem to be supportive once they know what NCEA entails. The lack of parental understanding of NCEA was identified as in need of attention in both the 2003 and 2006 National Surveys so it is somewhat disappointing to see this pattern still continuing.

The higher the year level of a responding parent's oldest child at school, the more likely they were to be supportive of NCEA, to agree that NCEA gives a valuable record of students' learning and that certificate endorsement was a worthwhile change to make. They were also more likely to disagree that we should go back to the previous system and that students have too much responsibility for NCEA choices (parents of Year 10 students were overrepresented in the group who agreed with this statement, perhaps reflecting the imminent choices facing their child on transition to the senior secondary school). Those whose oldest child was in Year 13 were more likely to disagree that assessment has too much influence on the curriculum either in the junior or senior secondary school.

Parents whose oldest child was in Year 13 were overrepresented in both the strongly agree and disagree groups for the statement about offering alternatives to NCEA such as Cambridge examinations or the Baccalaureate. The same pattern held for their views on whether we should create another assessment system.

Parents whose oldest child was still in Years 7, 8 or 9 were more likely to be unsure about all the aspects of NCEA raised in the survey. With their own child's or children's NCEA years still ahead of them, many of them seemed to lack the necessary knowledge and experience to respond either way.

Not all differences in patterns of parent responses are related to familiarity with NCEA. As we found in the age 16 phase of the Competent Learners study (Wylie et al., 2009) we also see indications that unhappiness with some aspect of their child's schooling might be associated with being negative about NCEA. This pattern will come more sharply into focus in the cluster analysis reported in the next section. Parents who strongly agree that alternatives to NCEA should be offered were also more likely to have said their child's school was not their first choice. The reverse also held—those who disagreed or strongly disagreed with the suggestion of offering alternatives to NCEA were more likely to have said the school was their first choice. Parents who said their child's school was their first choice. Parents who said their child's school was their first choice. Parents who said their child's school was their first choice. Parents who said their child's school was their first choice.

# 8. Associations between overall views of NCEA and other responses

As we did in 2006, we constructed a cluster variable for overall level of support for NCEA, based on individual patterns of responses to the sets of items that probed support for NCEA (principals and teachers = 16 items; trustees = 11 items; parents = 10 items; see Appendix A). The principal and teacher item sets related to moderation changes have no parent or trustee equivalents and were not used for this analysis.

# The clusters that emerged

In 2006 this analysis revealed just two clusters for each of the four groups surveyed—those who were "positive about NCEA", and those who were "negative about NCEA". Overall the 2009 principal and teacher responses showed a greater spread of views and so yielded three clusters. We called these "very positive", "positive but wanting improvements" and "other views". As in 2006, the parent and trustee responses yielded just two clusters: very positive and other views.

The next two tables show the overall composition of the clusters we found. It is important to keep *relative* support or lack of it in perspective. The final row of these two tables repeats data from one Likert item *I am supportive of NCEA*, and shows the percentages of each group who disagreed or strongly disagreed with this explicit statement. Illustrating why this check on perspective is important to keep in mind, just over a third of the teachers in the other views cluster expressed outright personal opposition to NCEA. The balance of the cluster was *relatively* less supportive than other respondents. The contrast is even more marked for the principals, trustees and parents.

Results of cluster analysis	Principals %	Teachers %
Very positive	39	28
Positive but wanting improvements	36	38
Other views	25	34
Response to Likert item I am not supportive	2	13

Table 14 Results of 2009 cluster analysis for principals and teachers

Results of cluster analysis	Trustees %	Parents %
Very positive	42	42
Other views	58	58
Response to Likert item I am not supportive	11	16

#### Table 15 Results of 2009 cluster analysis for trustees and parents

## Relationship between NCEA support and familiarity with its practices

Parents who were also employed in the education sector (20 percent of the total sample) were more likely to be in the very positive cluster than those who were not. Recall that the consistent pattern in previous sections is of high levels of parental uncertainty for many aspects of NCEA, particularly for parents whose youngest child has not yet reached the NCEA years. These are indications that familiarity with NCEA increases the likelihood of parental support.

In 2006 we did not find evidence of an association between teachers' level of support for NCEA and their age or time in the role. This pattern still held for age in 2009 but there was a clear relationship between cluster and teaching experience. The longer a teacher had been in their role, both overall and in their present school, the more likely they were to be very positive about NCEA. Those with less than two years of experience were overrepresented in the other views cluster (just five of the 51 teachers in this early career group were very positive about NCEA). Teachers with three to 10 years of experience were overrepresented in the middle group—i.e., positive but wanting improvements—while those with 11 or more years' experience were overrepresented in the very positive group. This pattern is not entirely surprising, given the demanding professional learning associated with becoming a teacher in general. In this context NCEA could easily become just one more complication. Does it take at least three years, at a minimum, to become comfortable with standards-based assessment practices and the requisite demands they make of teachers' own judgements? This question bears further investigation, perhaps a longitudinal study of new teacher learning.

Principals in their first two years in the role were overrepresented in the positive but wanting improvements cluster.

# Decile-related differences

Whereas few significant demographic differences were found in 2006, the 2009 analysis did reveal a decile-related difference in the teacher clusters, and there have been a number of indications why this might be so in Section 7. Teachers in mid-decile schools (deciles 3–8) make up almost 70 percent of the sample (see bottom row of table below), so we would expect them to also make up the majority in each cluster, but the next table shows that they are relatively overrepresented in the other views cluster whereas deciles 1 or 2 teachers are relatively

overrepresented in the very positive cluster. Notwithstanding this difference (which is statistically significant) the overall pattern is one of a spread of views in all three decile groupings.

Cluster orientation	Deciles 1–2 %	Deciles 3–8 %	Deciles 9–10 %	Total %
Very positive	20	62	18	100
Positive but wanting improvements	13	67	20	100
Other views	9	74	18	100
Total % by decile	13	68	19	100

Table 16 Decile-related differences for frequency of responses in teacher clusters

## Patterns of associations in the principal clusters

There were some indications that principals in the very positive cluster were more likely than their peers to be curriculum innovators. These principals tended to identify changing aspects of pedagogy and making greater use of authentic contexts for learning as very important to *NZC* implementation. Both they and principals in the other views cluster were more likely to say it was very important to rewrite schemes of work and unit plans and to get Māori input into the curriculum. It may be that this revision of schemes and consultation was seen as important for different reasons—engaging students as indicated by the curriculum vision, values and principles vs. being seen to engage with *NZC* as required? Principals in the positive but wanting improvements cluster were likely to be more lukewarm about the need to do both these things.

It is particularly interesting that just one item in the bank that probed moderation reforms and the standards review was significantly associated with the principals' overall NCEA stance. This was the statement that other standards should be able to contribute to NCEA. Not surprisingly, the very positive principals were more likely to *strongly* agree while principals in the other two clusters were more likely to agree or not be sure.

As might be expected, principals in the other views cluster were more likely to say some students at the school were assessed using the Cambridge Examinations. They were also more likely to say they had gained students at the expense of other schools. There could be many reasons for roll growth but if the type of qualification offered is seen as an important driver of such growth this doubtless reinforces any belief these principals might hold in the marketing power of offering alternatives to NCEA.

When considering "today's students" we found no overall differences in views about student engagement or behavioural issues. However, principals in the very positive cluster were likely to *strongly* agree that school is the most appropriate place from which students can be guided into post-school study/work/training options, while those in the positive but wanting improvements cluster were likely to simply agree, and those in the other views cluster to disagree or be unsure. Principals in the very positive cluster were also more likely to endorse the idea that if the school-leaving age was 18 their school could cater for a wide range of students and their pathway

interests. Positive but wanting improvements principals were more likely to disagree and those in the other views cluster to strongly disagree with this statement.

# Patterns of associations in the teacher clusters

As in 2006, we found the greatest number of positive associations in the teacher clusters. Accordingly, these results have been split into several themes. Reflecting the pattern seen throughout the earlier sections of the report, teachers in the very positive cluster were likely to report very good morale, those in the positive but wanting improvements cluster good morale and those in the other views cluster satisfactory or poor morale. Teachers in the very positive cluster were likely to were more likely to be interested in becoming a principal in the future.

#### Personal orientation to innovation

Teachers in the very positive cluster were likely to report that they had been involved in a comprehensive exploration of the various components of *NZC* (i.e., at whole-school, faculty *and* individual levels). This pattern applied to the principles, vision, values, key competencies, effective pedagogy and learning area statements of *NZC*. Teachers in the other views cluster were likely to have explored *NZC* in none or just one of these ways. They appeared to be less actively engaged with *NZC* implementation, if at all.

Teachers in the very positive cluster showed overall stronger agreement that it would be *very important* to the implementation of *NZC* to: develop the school vision and values; change aspects of pedagogy; rewrite schemes and unit plans; make greater use of authentic contexts; use more self and peer assessment; get more parent, community and Māori input into the school curriculum; give students a voice in curriculum planning; introduce new types of courses, with more pathways through the senior secondary school; and reorganise school reports. Interestingly, they were no more likely than teachers in the other two clusters to identify the redesign of NCEA assessments in this long list of potential responses to *NZC* implementation and there were no differences in relation to using the key competencies. It was not that other teachers did not also identify some of the above actions as important—teachers in the positive but wanting improvements cluster often did so, but they were not as likely to see these changes as *very* important. Teachers in the other views cluster were likely to say it was not important to undertake this range of actions.

Looking at how the high-level curriculum ideas might translate into actual differences in the classroom, teachers in the very positive cluster were relatively more likely to say they strongly valued: student inquiry about real issues, making connections with students' worlds and finding out what interests them; hands-on practical activity; integration of literacy components into learning; making time for students to think and talk about how they are learning and for the teacher to find out and work with their current understandings; getting students to assess each other's work and give feedback; discussing different ways of looking at things; and to share assessment decision making with students. Again it was not that other teachers did not also agree that they valued many of these things. The overall trend was for less emphatic agreement from the

positive but wanting improvements cluster and higher levels of not sure responses or indications that they did not value some of these things from the other views cluster. The only item in this set for which there was no difference was integration of content from several subjects.

Saying you value something is not the same as actually doing it. Teachers were asked to respond to the above item set a second time, estimating whether they did these things most of the time, quite often, sometimes or never. The pattern reported in the above paragraph held for most items. Exceptions were hands-on practical activity (a third of the teachers in all three clusters said they did this most of the time), finding out what interests students (at least half the teachers in all three clusters said they did this at least "quite often") and getting students to assess each others' work and give feedback. A separate item bank that probed use of learning-to-learn strategies revealed a similar pattern. Teachers in the very positive cluster were likely to report more frequent use of: student involvement in setting topics; peer-review processes;<sup>10</sup> or co-creating NCEA assessment plans.<sup>11</sup> Congruent with all of the above, teachers in the very positive cluster were more likely to say there were no barriers to making changes in the curriculum they taught, and when they did identify barriers, to identify fewer of these.

#### Beliefs about today's students

Teachers in the other views cluster were the most likely to strongly agree or agree that today's students are harder to engage than they were five years ago. Those in the positive but wanting improvements cluster were likely to agree or be unsure and those in the very positive cluster to disagree or strongly disagree. Teachers in the very positive cluster were more likely to strongly agree or agree that school is the most appropriate place from which students can be guided into post-school study/training/work options. Those in the positive but wanting improvements cluster were likely to agree or be unsure and those in the other views cluster to be unsure, disagree or strongly disagree. Very positive teachers were also likely to strongly agree that the school could create more flexible learning pathways for senior students compared to five years ago. For this item the teachers in the other views cluster were likely to agree to the positive but wanting improvements cluster were more likely to be unsure. This is an interesting change to the pattern described in the paragraphs above and begs some questions about whether the idea of "flexible pathways" was interpreted in the same way by all the responding teachers.

<sup>&</sup>lt;sup>10</sup> Albeit off a very low base—just 3 percent of teachers said they did this most of the time and a further 26 percent quite often. For teachers in the totally supportive cluster the response rates were 4 percent (most of the time) and 34 percent (quite often).

<sup>&</sup>lt;sup>11</sup> This is off an even lower base—3 percent most of the time and just 7 percent quite often. For teachers in the totally supportive cluster the response rates were 5 percent (most of the time) and 10 percent (quite often).

#### Professional learning and support

For a range of professional learning initiatives, teachers were asked to indicate if they had taken part, changed their thinking for the better and/or improved their practice. They could choose any or all of these three options, or none. Again the clear pattern was one of more likelihood of active engagement in professional learning for teachers in the very positive cluster. They were more likely to indicate two or three types of action (participation in professional development, reflection on implications, actual change in practice) related to: literacy/literacy across the curriculum; Te Kotahitanga; and involvement in a learning area conference. Teachers in the other views cluster were likely to indicate that they had taken part in none of these and the positive but wanting improvements cluster were again somewhere in between. There was a trend for the same pattern to apply to higher education study (for example, undertaking an M Ed).

Teachers in the very positive cluster were likely to strongly agree that: some structured professional learning had had a powerful impact on their practice; the school leaders modelled inspiring professional learning; experimentation with new ideas was encouraged and supported at the school; they had good opportunities to explore deeper ideas and theory that underpin new approaches; professional activities beyond school had stimulated their professional growth; that they had good opportunities to see and discuss the work of teachers that interested them---in their own and other schools-and that school leaders ensured they had useful blocks of time for their professional learning. Some of the items in this set were negatively worded. Congruent with this, teachers in the very positive cluster were likely to disagree or strongly disagree that: there is too much emphasis on structured PD nowadays and on "student voice" and similar ideas; structured PD is a waste of money and that it gives unhelpful mixed messages; and that PD had been insufficiently focused on implications for their learning area. Teachers in the other views cluster were more likely to agree or strongly agree with all these statements. There was a trend for teachers in the very positive and positive but wanting improvements clusters to disagree that they saw no need to change current practice (just 9 percent of teachers actually agreed with this statement). The only item in this whole set that did not show cluster differences was "based on what I've learnt, I wonder if students can often do more than we typically expect". (Note that 64 percent of teachers agreed or strongly agreed with this statement and just 10 percent disagreed.)

This pattern of differences continued when teachers responded to a bank of items about ways others in the school collegially supported them in their work. Those in the very positive cluster were likely to indicate that all of the following are very good or good: sharing of teaching resources, assessment resources, lesson planning, teaching ideas, knowledge of students and ideas for helping students improve their performance; mentoring of provisionally registered teachers; a consistent school-wide positive approach to discipline and behaviour; timely support with student behavioural problems and with teaching problems; support for taking risks in teaching; analysis of students' achievement to guide teaching and learning; setting of useful targets for student achievement; developing leadership skills among teachers; and the discussion of assessment results with other teachers to help students improve their performance. The very positive cluster gave the overall most positive levels of response for every item in this set. Teachers in the

positive but wanting improvements cluster were likely to identify many of these practices as good, but not very good—a difference of emphasis. Teachers in the other views cluster were more likely to rate them as poor or very poor.

Other school processes that support professional learning also showed differences. In another interesting exception to the general pattern, teachers in the positive but wanting improvements cluster were likely to strongly agree that teachers could discuss any teaching problem with a more expert colleague, while those in the very positive cluster were likely to simply agree. It may be that confident teachers make little personal use of this support, and hence saw no need to make an emphatic response. The typical pattern of those in the very positive cluster being likely to *strongly* agree and those in the positive but wanting improvements cluster to agree held for: departmental meetings are often used for discussing student achievement and strategies to improve it where needed; staff have good processes for making group decisions and/or solving problems; I can get useful feedback on student engagement in my class by asking a colleague to observe; the school goals really do guide our day-to-day work; and this school retains good teachers. A reverse item "we let outside organisations dictate how we do things" also held the typical pattern of very positive cluster teachers strongly disagreeing and some level of agreement from other views teachers. Teachers in the other views cluster were more likely to be unsure or to disagree with all the other items listed in this paragraph.

Teachers in both very positive and positive but wanting improvements clusters were likely to strongly agree or agree that there was career progression available in their school; and that the appraisal system had been a useful prompt to think about where they were heading with their work. Very positive cluster teachers were likely to strongly agree that the teachers in the school actively work to engage and motivate all students. For this item the teachers in the other views cluster were likely to agree while those in the positive but wanting improvements cluster were likely to be unsure or to disagree. Since they were being asked to make a judgement about an aspect of their colleagues' work, this deviation from the typical pattern of responses might simply reflect a tendency for teachers in this cluster to be generally more sceptical. Teachers in the very positive cluster were more likely to agree that they had good opportunities to observe effective colleagues; that they had regular meetings with their manager about their work that supported that work and gave them new insights; and that teachers who are new to the school are guided into the practices the existing staff have found to be effective, while positive but wanting improvements teachers were again likely to be unsure.

#### Leadership in the school

A similar pattern held for the set of items about the principal's leadership of the school. Teachers in the very positive NCEA cluster were more likely to strongly agree that the principal: is really knowledgeable about teaching and learning; is an active participant in PD with teachers; has high integrity; shows personal and professional respect for staff; is open to learning and admits mistakes; actively seeks others' views; and makes tough decisions when necessary. Along with teachers in the positive but wanting improvements cluster they were more likely to strongly agree that the principal: serves the interests of the whole school rather than particular interest groups; identifies and resolves conflict quickly and fairly; promotes and models the values of the school; has the respect of all staff; has the respect of different ethnic communities served by the school; and seeks high-quality information about a situation before making a final decision. There was a trend for teachers in the very positive cluster to be more likely to say the principal leads useful discussions about the improvement of teaching and learning.

Teachers in the other views cluster were more likely to disagree with all the above statements about principal leadership. Just two items in this set did not show significant differences: the principal has the respect of the wider community and the principal says what s/he thinks and explains why.

#### Beliefs about community engagement

Teachers in the very positive cluster were more likely to strongly agree that parents/whānau should: have the opportunity to be involved in decisions about their child's learning; be involved in decisions about learning in general at the school; and have regular opportunities to discuss in detail their child's progress and future options in the school. Those in both the other clusters were likely to agree with the first and third of these items while those in the other views cluster were more likely to disagree that parents should be involved in general learning decisions at the school.

Teachers in the very positive cluster were more likely to strongly agree or agree that: the community has realistic expectations of what the school can provide; the community trusts the school; and that the community puts a high value on educational success. Those in the other views cluster were more likely to disagree or be unsure, with those in the positive but wanting improvements cluster to be somewhere in the middle. Teachers in the other views cluster were also more likely to agree that the community is divided and contains groups with conflicting wishes, while those in the very positive cluster were more likely to disagree.

Teachers in the very positive cluster were also more likely to strongly agree that the school's BOT was on top of the task and that its level of responsibility was about right.

## Patterns of association in the trustee clusters

Trustees in the very positive cluster were more likely to agree that the BOT chair and principal trust each other and that the BOT adds real value to the school. They were more likely to say they had expertise in understanding achievement data, and that they represented the school at functions for parents. The very positive trustees were more likely to have a definite view (either way) concerning satisfaction with the board's level of contact with parents. The picture that emerges is suggestive of confident, highly engaged trustees.

By contrast, trustees in the other views cluster were more likely to say they were unsure about many of the above matters. Interestingly, trustees who identified curriculum/subject options as an issue about which the BOT consulted parents, or who said the BOT needed more expertise in ICT

were likely to be in the other views cluster. Adding to this picture of a different type of engagement with the trustee role, those who identified any of the following as a major issue facing their school were likely to be in the other views cluster: recruitment of teaching staff; staffing levels; quality of teaching; student behaviour/discipline; NCEA workload. The picture is indicative of attention directed to traditional educational challenges and problems rather than innovation and leadership.

# Patterns of associations in the parent clusters

Parents in the very positive cluster were more likely to have several children at the school and to say this was the first choice of school for their child or children, often giving the reason that older siblings also went there.

There were differences in response patterns for every item in the set regarding their child's experiences of school. These differences suggest that the parents in the very positive cluster were likely to be happier about their child's learning and more engaged with what was happening at school, while those in the other views cluster were more likely to either indicate a level of dissatisfaction, or in many cases simply greater levels of uncertainty about what was happening in their child's school learning. For example, parents in the very positive cluster were more likely to agree that:

- their child's *teachers* motivated him or her to want to learn, were committed and enthusiastic, were aware of their child's strengths and weaknesses, helped them set realistic learning goals, gave clear feedback about their child's work and responded to any concerns they (the parent) might have
- the *courses* their child was taking met their academic needs, involved the right amount of challenge and were interesting to the child, and they were generally happy with the quality of their child's schooling
- teachers held *high expectations* and they were pleased with the *progress* their child had made during the year
- their child's teachers made an effort to understand things about their *family and culture*, they (the parent) felt welcome when they came to the school and they got good ideas from the school about how to help their child's learning.

Many parents agreed that their child felt a sense of belonging at school, but parents in the very positive cluster were more likely to strongly agree that this was the case. This pattern also held for the statement *I would recommend this school to other parents*. Parents in the other views cluster were more likely to see student achievement levels and the quality of teaching as main issues facing the school.

There was an interesting split in the opinions for the very positive cluster about whether the cultural identity of their child was recognised and respected. These parents were more likely to strongly agree but also more likely to disagree (i.e., their views were more polarised). Parents in

the other views cluster were more likely to agree or be unsure, perhaps suggesting that culture was not an issue for their child. Parents in the very positive cluster were more likely to see Māori student achievement as a main issue facing the school. Relatively few parents (4 percent) said they saw a declining school roll as a main issue but these parents were again more likely to be in the very positive cluster.

Congruent with the pattern painted by the above differences, parents in the other views cluster were more likely to say there were things they would like to change about their child's schooling. The changes they were more likely to want included: more individual help for students; smaller class sizes; more communication about progress; more information to support their child's learning at home; more strict discipline; more parental involvement; and less homework. These parents were more likely to see their child's overall learning programme and progress as satisfactory, at best, and in some cases as poor. Asked what they would like more information about, parents in the other views cluster were more likely to say they wanted more detailed information in their child's progress, and specifically they wanted to see a comparison to national standards, and that they wanted more information about the options open to their child in terms of their progress.

There was a sense that parents in the very positive cluster had actively sought out information about education in general. They were more likely to identify all of the following as main sources of information: family; the radio; magazines; the MOE; Education Review Office (ERO); and the Team Up website. They were more likely to have read the school's annual report and the BOT newsletter, to be satisfied with how the school develops its charters and annual plans and to agree that the school genuinely consults about new directions/issues. They were also more likely to identify involvement in the school's parent association, school council or the BOT. Congruent with this they were more likely to *strongly* agree that parents/whānau should have the opportunity to be involved in decisions about their child's learning and that the purpose of interactions between school and parents/whānau should be so that the school can better support students' learning. (Parents in the other views cluster did not necessarily disagree but their agreement was more likely to be less emphatic or they were unsure.) Very positive cluster parents were also more likely to agree that the school and its community value similar things, that the community is open to new learning, that it has realistic expectations of what the school can provide and that the community puts a high value on educational success. Again, parents in the other views cluster were more likely to be unsure or to disagree with these statements.

Parents in the other views cluster were more likely to say other parents were a main source of information about education and to say they wanted more information about the school, or to be not sure about this. They were also more likely to say they had no contact with the school, and to identify information needs in relation to: BOT decisions; the curriculum; overall student achievement; and information in general. Nevertheless when asked if there were areas of school life where they wanted more of a say and felt they could not, they were often unsure. (Parents in the very positive cluster were less likely to feel they were not able to have a say.) Parents in the other views cluster were more likely to want to have a say on school uniforms/dress.

# **Concluding comment**

The analysis paints an interesting picture of engagement with ongoing educational change as a key driver of strong support for NCEA. For example, the evidence outlined above suggests that the very positive cluster principals were curriculum innovators. They were likely to say their school had initiated curriculum and pedagogical changes aligned with the directions signalled in *NZC*, and to hold the view that a breadth of learning experiences and multiple learning pathways can legitimately contribute to an NCEA qualification.

Making connections between ongoing change and new learning opportunities (both for themselves and for students) appears to be the province of the most experienced and confident teachers. The many associations listed above show that those teachers who were most positive about NCEA were also more likely to have been involved in comprehensive exploration and enactment of the various components of *NZC*. They were less likely to see NCEA as a barrier to curriculum change and they tended to hold more positive views of student engagement in learning. They were likely to be more positive about their own professional learning and about the collaborative learning possibilities they experienced in interactions with their peers. They were also more likely to be welcoming of community participation in determining curriculum and learning directions for the school.

Continuing this pattern, the differences in response patterns listed above suggest that those parents who were positive about NCEA were happier about their child's learning, more engaged with what was happening at school and more proactive about seeking information and getting involved. By contrast, parents who expressed more concerns about NCEA were also more likely to be concerned about a range of aspects of their child's learning and progress, including how information about progress was communicated to them by the school. There were indications that this anxiety could translate into a desire for more normative information—to see how their child compared with others nationally. This could be one factor in the popularity of certificate endorsement because it allows for at least some more differentiated comparison with the achievements of their child's peer group.

# 9. The evolving NCEA

This report contributes to our knowledge about the ongoing evolution for NCEA in several ways. There are indications that recent rolling changes to NCEA's standards and processes have been, by and large, well received. However, as with any complex set of changes, the intended consequences can be in tension with new challenges that surface as the change is enacted, or that were always present but pointing in a counter-direction. The report gives clear indications, for example, of the tension between the credibility of NCEA as a qualification and its ability to deliver on the foundational intent of making achievement success more accessible for lower or underachieving students.

Certificate endorsement has been very well received. This and other recent changes such as the standards review and tightening of moderation procedures have doubtless contributed to higher levels of agreement that NCEA is a credible qualification. Yet the combination of certificate endorsement (to which only achievement standards contribute) and the standards review (which could see many unit standards removed from the NCEA framework) raises the issue of consequences for the flexible provision of courses for lower achieving students. Getting the balance right is clearly not easy and we will continue to monitor this tension in the next NZCER National Survey of Secondary Schools.

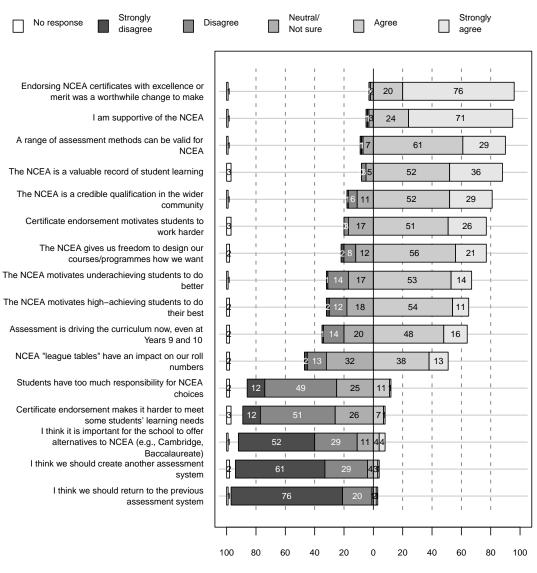
Rolling changes might also contribute to continuing high levels of uncertainty about NCEA, especially for those who are somewhat more removed from enacting NCEA-the parents and trustees. This is not a new issue. We discussed it in the last NCEA report from the National Survey (Hipkins, 2007) and have also done so in the Competent Learners study when these students were aged 16 (Wylie et al., 2009). Yet, seemingly, little has changed in the years between. There are indications in this report that their child's direct experience of NCEA continues to be a main source of parents' views about the NCEA in action. (Presumably, parents whose children go directly into an alternative system such as Cambridge are unlikely to learn anything about NCEA in action at all.) New research from the Starpath project points to the possibility of enhanced student achievement when parents are actively involved in unpacking NCEA choices and supporting their child on a worthwhile learning pathway, in partnership with the school leaders, deans and teachers, who also need to be working together (McKinley et al., 2009). Here the flexible pathways/credibility tension, outlined above, comes together with the issue of what parents do and don't know about NCEA. If we really do want all learners to have the chance to succeed to the very best of their abilities then ensuring that parents are wellinformed partners in their child's education is a challenge that should be addressed at all levels of the education system from the MOE and NZQA down to individual schools. There are also implications for the training and support provided to new school trustees.

Rolling changes can also contribute to teacher uncertainties. While there are some changes about which many teachers are still uncertain (e.g., changes proposed for the standards review) uncertainty is particularly acute for the early career teachers, with the consequence that they are likely to be more equivocal in their support for NCEA. This pattern points in the direction of several interesting questions that the survey cannot answer. How well are preservice teachers being prepared for their assessment responsibilities? How well are they supported to learn from NCEA in action (e.g., during team-level moderation meetings)? Assuming they completed four years of study direct from school and went straight into teaching, year one teachers responding to this survey would have been in Year 13 at school when NCEA was first introduced at Year 11. Did the turmoil and foment at this time impact on their continuing views, and if so in what ways? If so, will this issue abate as early-career teachers arrive with direct personal experience of NCEA from their own school years? All these questions bear further investigation.

Notwithstanding the tensions and uncertainties of ongoing change, many school leaders and teachers appear to be thriving in the NCEA regime. They are likely to be working in schools where strong professional leadership is in evidence and to be active leaders of learning, with rolling changes to moderation procedures as one potential source of valued learning feedback. Change is more likely to be accepted if its underlying purposes are understood and agreed with. The introduction of NZC provides another opportunity to address the reasons for making changes in secondary schooling (to which the introduction of NCEA was an earlier response). There is now a stronger alignment between curriculum policy and the intent of NCEA and this report shows that in-principle support for curriculum change and support for NCEA are strongly linked. Even so, we still see the continuation of the strongly entrenched view that assessment drives the curriculum in the senior secondary school, and that this influence extends downwards to Years 9 and 10. It may be that this tension will begin to resolve as innovative teachers create new assessment tasks that more evidently align with the potentially transformative "21st century" directions signalled by NZC. For the majority of teachers and school leaders, the trend to increasing support for NCEA, combined with widespread approval for NZC's new directions (Cowie et al., 2009), could be seen as fertile ground on which to continue progress towards the implementation of much discussed (but as yet little enacted?) "21st century" approaches to education. We will continue to track this complex evolutionary change in future NZCER national surveys.

# References

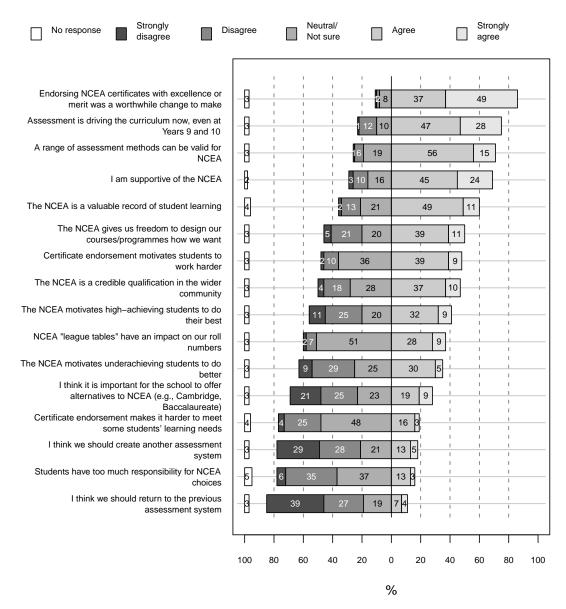
- Cowie, B., Hipkins, R., Boyd, S., Bull, A., Keown, P., McGee, C., with Bolstad, R., Cooper, B., Ferrier-Kerr, J., Hume, A., Mckim, A., Moreland, J., Morrison, M., Spiller, L., Taylor, M., & Yates, R. (2009). *Curriculum implementation exploratory studies: Final report*. Wellington: Ministry of Education. http://www.educationcounts.govt.nz/publications/curriculum/57760/1
- Hipkins, R. (2007). *Taking the pulse of NCEA*. Wellington: New Zealand Council for Educational Research. http://www.nzcer.org.nz/default.php?cPath=343 130 131&products id=1983
- Hipkins, R., Vaughan, K., Beals, F., Ferral, H., & Gardiner, B. (2005). Shaping our futures: Meeting secondary students' learning needs in a time of evolving qualifications. Wellington: New Zealand Council for Educational Research. www.nzcer.org.nz
- Madjar, I., McKinley, E., Jensen, S., & van der Merwe, A. (2009). Towards university: Navigating NCEA course choices in low-mid decile schools. Auckland: Starpath Project, The University of Auckland.
- McKinley, E., Madjar, I., van der Merwe, A., Smith, S., Sutherland, S., & Yuan, J. (2009). *Targets and Talk: Evaluation of an evidence-based academic counselling programme* Auckland: Starpath Project, The University of Auckland.
- Meyer, L., McClure, J., Walkey, F., McKenzie, L., & Weir, K. (2006). The impact of NCEA on student Motivation. Wellington: Report prepared by Victoria University of Wellington for Ministry of Education. www.minedu.govt.nz
- Meyer, L., McClure, J., Walkey, F., Weir, K., & McKenzie, L. (2009). Secondary student motivation orientations and standards-based achievement outcomes. *British Journal of Educational Psychology*, 79, 273–293.
- Ministry of Education. (2007). The New Zealand curriculum. Wellington: Learning Media.
- New Zealand Qualifications Authority. (n.d.). *Standards review—Stage 4: Review of NCEA qualifications—making a start*. http://www.tki.org.nz/e/community/ncea/pdf/litnum-ncea-design.pdf
- Raffe, D. (2009). Can National Qualifications Frameworks be used to change education and training systems? CES Briefings, no. 48. Edinburgh: Centre for Educational Sociology (CES). http://www.ces.ed.ac.uk/PDF%20Files/Brief048.pdf
- Wylie, C., Hipkins, R., & Hodgen, E. (2009). On the edge of adulthood: Young people's school and out-of-school experiences at 16. Wellington: Ministry of Education.

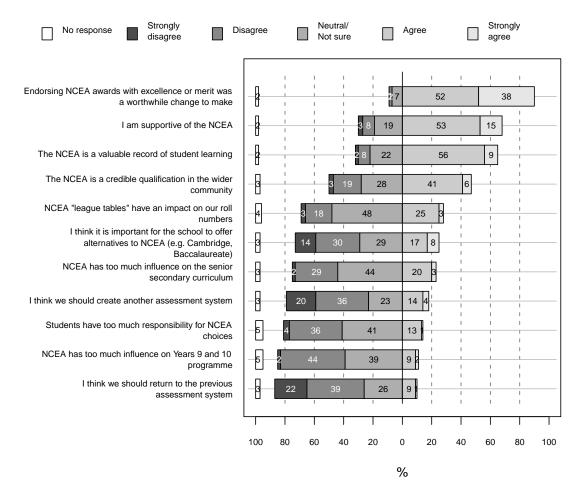


#### Figure 19 Full set of principal responses

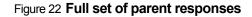
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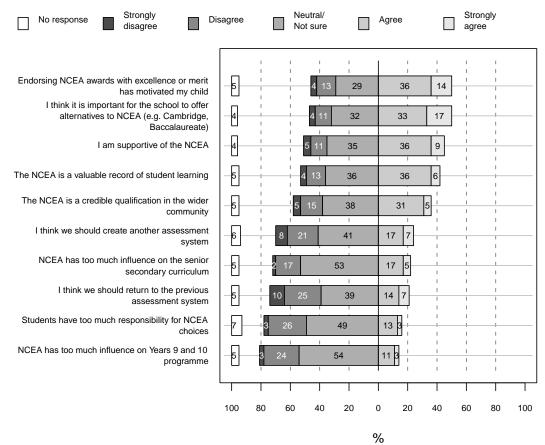
#### Figure 20 Full set of teacher responses





#### Figure 21 Full set of trustee responses







# Appendix B: Profiles of respondent groups

The following analysis shows that the responses of principals, teachers, trustees and parents were broadly representative of the overall demographic profile of New Zealand secondary schools. In the tables that follow, the first column shows the overall profile of New Zealand's secondary schools. The following columns show how closely each group matches this reference point.

Each school has only one principal and just two trustees were invited to respond, so we can expect the profile of the sample and the profile of New Zealand's schools to match if the responses are representative, as the table shows they do. However, because multiple responses were invited from teachers and parents, their responses can be considered in two ways. Many more teachers are employed in bigger schools so it is not possible to simultaneously represent the full teacher population *and* the experiences of teachers in different types of schools in the same sample. The same applies for parents. For these two groups, representativeness is compared from the two different perspectives in the second of the school size tables. Here we see that the teacher sample appears to somewhat underrepresent individual teachers in small schools and overrepresent those in bigger schools, but the actual mix of schools from which teachers responded is broadly representative of the mix of New Zealand secondary schools. The same pattern is found in the parent sample.

# School size

Size	MOE data % (n=315 schools)	Principals % (n=194)	Teachers % (n=818)	Trustees % (n=278)
100–249	8	8	2	9
250–399	14	14	8	14
400–749	31	31	28	30
750–1,499	34	37	44	34
1,500+	12	11	18	12

#### Table 17 Profile of responses by school size

Note: Numbers may not add to 100 because of rounding.

School size (% of school population in brackets—see Table 17)	All teachers responding	Schools from which teachers responded	All parents responding	Schools from which parents responded
100–249 (8%)	2	4	2	8
250–399 (14%)	8	13	7	17
400–749 (31%)	28	33	21	31
750–1,499 (34%)	44	37	42	34
1,500+ (12%)	18	12	28	11

Table 18 A comparison of parent and teacher samples from two different perspectives

Note: Numbers may not add to 100 because of rounding.

# School decile

The largest secondary schools tend to be high-decile schools and so we see a small overrepresentation of teachers in larger schools. The slight underrepresentation of low-decile schools, for all groups, is likely to be associated with the smaller size of many of these schools.

Decile grouping	MOE data % (n=315 schools)	Principals % (n=194)	Teachers % (n=818)	Trustees % (n=278)	Parents % (n=1,877)
1–2 low	15	13	13	13	14
3–8 mid	68	71	68	68	70
9–10 high	17	16	19	20	17

Table 19 Profile of responses by decile

Note: Numbers may not add to 100 because of rounding.

# School type

In the past we have differentiated between three types of urban schools: main (centre city); minor (town); and secondary urban (suburban). However, this level of distinction has yielded little in the way of fruitful analysis and so the 2009 data have been collapsed into two main categories. Again the teacher sample is weighted towards the main urban areas, which tend to be where the largest schools are located. Note, however, that trustees from rural schools are somewhat overrepresented in the sample.

School type	MOE data % (n=315 schools)	Principals % (n=194)	Teachers % (n=818)	Trustees % (n=278)	Parents % (n=1,877)
Urban	93	94	96	91	94
Rural	7	6	4	9	6

#### Table 20 Profile of responses by school type

Note: Numbers may not add to 100 because of rounding.

# **School authority**

For this characteristic, principal, teacher and trustee samples are skewed, more so for principal and teacher samples than for trustees. State-integrated schools are underrepresented. The parent sample matches the distribution of schools by authority.

## Table 21 Profile of responses by school authority

Authority	MOE data % (n=315 schools)	Principals % (n=194)	Teachers % (n=818)	Trustees % (n=278)	Parents % (n=1,877)
State	78	82	85	80	78
State-integrated	22	18	15	20	22

# Appendix C: Profile of respondents

# Principals who responded

Principals of all state and state-integrated secondary schools were invited to participate. The overall response rate for principals was 59 percent<sup>12</sup> with returns from 187 of a possible 319 secondary schools. More males (68 percent) than females responded, reflecting gender differences in this role. Most of these principals (94 percent) identified as Pākehā/European. Using a prioritised ethnicity allocation process, six identified as Māori, one principal identified Pasifika affiliations and one identified Asian affiliations. Nearly a quarter (24 percent) of respondents had become principals in the past two years.<sup>13</sup> A further 14 percent had served between three and five years, 35 percent between six and 10 years, 16 percent between 11 and 15 years and 10 percent over 15 years.

### **Teachers who responded**

One in six teachers in state and state-integrated secondary schools were randomly invited to participate.<sup>14</sup> Of the several thousand teacher surveys distributed, 34 percent were returned in a sufficiently completed state to be included. Responses came from 204 of the country's 316 state and state-integrated secondary schools, ranging from a single teacher to 14 at the same school. Teacher responses are therefore not necessarily representative of each individual school.

Sixty-four percent of the respondents were female, which is almost identical to the response profile in 2003 and 2006 and is representative of the gender composition of teachers. Eighty-four percent of the respondents identified as Pākehā/European, 7 percent identified as Māori, 3 percent as Asian and 2 percent as Pasifika or as "New Zealander" respectively. Again the teacher profile is very similar to the pattern of 2006 returns. Sixty-six percent of the responding teachers had some management responsibility. Six percent were senior managers, 38 percent were middle managers (e.g., curriculum or faculty leaders), 10 percent were specialist classroom teachers and 12 percent were deans. Six percent of respondents had become teachers in the past two years. A further 10 percent had served between three and five years, 18 percent between six and 10 years, 14 percent between 11 and 15 years and 50 percent over 15 years.

<sup>&</sup>lt;sup>12</sup> Down slightly from 62 percent in 2006.

<sup>&</sup>lt;sup>13</sup> Up from 17 percent in 2006.

<sup>&</sup>lt;sup>14</sup> PPTA representatives placed the surveys in teachers' pigeonholes, following a random allocation protocol designed by NZCER.

# **Trustees who responded**

Every BOT chair was invited to respond, and to also invite one other trustee, who might be expected to have a differing viewpoint on some matters, to take part. Each trustee returned their completed survey individually. Forty-two percent of a potential pool of 632 trustees responded (n=266). Just one trustee responded from 98 schools, with two responding, as requested, from a further 84 schools. Fifty percent were chair of their BOT.

Responding trustees tended to be relatively experienced in the role. As in 2006, the mean length of time as a trustee was four years. Just 4 percent had been a trustee for less than one year and 41 percent had served in this role for more than five years. As in 2006, the most common reason for wanting to be a trustee was to "contribute to the community" (85 percent).

# Parents who responded

With the help of the school management, parents from a nationally representative<sup>15</sup> subsample of 37 schools were surveyed and responses were received from 36 of these. Of 5,739 surveys sent out, 1,877 were returned in a sufficiently complete state to be used—a response rate of 33 percent. Ninety-six percent of parents currently had one or two children at the school. Twenty percent of respondents indicated they were employed in the education sector.

<sup>&</sup>lt;sup>15</sup> Stratified by size and decile.

# Appendix D: Cross-tabulated variables

**Decile:** Schools were divided into three groups: low (deciles 1 and 2); mid (deciles 3–8); and high (deciles 9 and 10). Past experience shows that this grouping differentiates between the ends of the range more clearly than dividing the schools into groups of three/four deciles (i.e., 1–3, 4–7, 8–10).

**Experience:** This applied to the principal and teacher surveys only. Respondents were divided into three groups by the length of time they had been teaching, or been a principal. Some groups collapsed several categories from the actual survey responses: 0-2 years; between 3 and 10 years (3–5, 6–10); 11 or more years (11–15, 15+).

**Morale:** Here we used three categories for the cross-tabulation: very good/excellent; good; and satisfactory/poor/very poor. Because response numbers in the poor or very poor categories were very low, combining them with satisfactory responses made for more evenly sized groups.

Overall morale	Principals %	Teachers %
	(n=187)	(n=870)
Very good/excellent	45	26
Good	40	44
Satisfactory	12	20
Poor	2	6
Very poor	1	1
No response	1	3

Table 22 Principal and teacher self-reported levels of morale

Note: Numbers may not add to 100 because of rounding.

We found no significant relationship between levels of teacher morale and school decile, subject cluster, gender or teacher experience.

**Role in school:** Teacher respondents could nominate one of a large number of main roles. Five groups were created for cross-tabulation purposes. Senior managers (AP/DP): deans; HOD/faculty leaders; classroom teachers (who identified this role and no other) and an "other" category that gathered up those who nominated mixed roles or who were careers or guidance counsellors, special education teachers, sports co-ordinators, library staff and so on.

**Subject clusters:** Teachers nominated their teaching subject(s) from a provided list. They were divided into groups by a process of priorisation. Those teachers who nominated English and/or another language made up the first cluster; mathematics, science and accounting teachers,

including agriculture and horticulture teachers, made up the second cluster; the third cluster grouped teachers of social sciences, arts, commercial subjects and religious education. The fourth cluster was then composed of teachers of a range of subjects often considered more "practical" in their approach, including the various forms of technology, health and/or physical education, careers or transition subjects, guidance and special education teachers. A final ("other") category was composed of all others, including those who did not nominate a subject area.

**Oldest child at school:** Parents indicated all the year levels at which they had a child at the school: 7/8, 9, 10, 11, 12, 13. They were grouped according to the highest level they gave.