Curriculum changes, priorities, and issues

Findings from the NZCER secondary 2006 and primary 2007 national surveys

Sandie Schagen and Rosemary Hipkins

NEW ZEALAND COUNCIL FOR EDUCATIONAL RESEARCH

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Executive summary

The latest cycle of New Zealand Council for Educational Research (NZCER) national surveys took place in secondary schools in 2006 and primary schools in 2007. Questionnaires covering a wide range of topics were sent to all secondary schools, and a representative sample of 351 primary and intermediate schools. In a subsample of the schools, parents also were surveyed. Responses were generally representative of the national characteristics of schools. We analysed the responses by key factors such as location (urban/rural), school decile, and size of school roll. They were compared with those obtained in the previous (2003) surveys, in order to assess change over time, during a key period which heralded the introduction of the revised New Zealand curriculum (published in draft form after the secondary survey and before the primary one). The following are the key findings from the 2006–07 surveys.

Curriculum priorities in the primary school

- Mathematics, reading, and writing remained the top curriculum priorities in 2007.
- In 2007, getting to grips with the new draft curriculum, and introducing the key competencies, were identified by only a quarter of primary principals as areas where the school was putting its main energy and focus. However, a third said that they had already introduced the key competencies, and half were considering their introduction. Teachers were more likely than principals to say that they had already introduced the key competencies.
- A majority of schools had integrated ICT into learning, and implemented inquiry learning and thinking skills approaches; nearly all others were considering their introduction.
- Of a range of initiatives, the least popular was Education for Enterprise; only one-quarter of schools had implemented it or were considering doing so.
- Half of the primary teachers felt that the revised national curriculum would help them to integrate different curriculum areas and skills development; almost as many thought it would allow them to focus on fewer things. However, 30 percent said that it would not make much difference to what they were already doing.
- A quarter of the parents surveyed had heard of the new curriculum, but most were unsure about its likely impact, or were adopting a "wait and see" approach. With the exception of student achievement, issues relating to the curriculum, assessment, and ICT were of less importance to parents and trustees than to principals and teachers.

Curriculum priorities in the secondary school

- The revised New Zealand Curriculum was not published until after the survey, but its contents were known, and responses indicated that moves already taking place in schools were broadly aligned with the intent of the curriculum.
- Literacy and numeracy programmes had been implemented in a large majority of schools and were being considered in almost all others. The better integration of ICT into learning was said to have been achieved by two-thirds of secondary schools and was being considered by most of the rest. These findings reflect a marked change since 2003, particularly in numeracy programmes, which only a quarter of secondary schools had claimed to have in the earlier survey.
- Less progress had been made with the key competencies, but more than a quarter of schools had introduced them and half were considering doing so; similar progress had been made or planned with thinking skills and inquiry learning. Fewer secondary schools than primary schools had introduced such initiatives, but this may be because secondary schools were surveyed in 2006.
- Teacher responses differed by age, gender, and main subject taught; women, on the whole, were more willing to try out new approaches, and older teachers were more likely to have introduced a number of the new strategies.
- Integrating two or more curriculum subjects was less common in secondary schools than in primary schools. Secondary schools were also less likely to have introduced or considered a focus on assessment for learning, problem solving, inquiry learning, more depth on fewer topics, the key competencies, individual learning programmes, and using parents as a source of information.
- Comparison of secondary teachers' aspirations for curriculum change in 2003 and 2006 indicates a move away from a focus on quantity in terms of curriculum coverage, and towards quality (greater depth, more contemporary examples).
- Student achievement was an important issue for principals, teachers, trustees, and parents. Assessment workload, National Certificate of Educational Achievement (NCEA) workload, and assessment driving the curriculum were also of high importance to principals and teachers, but less so to trustees and parents.

Other factors that impact on curriculum

- A large majority of schools already had anti-bullying initiatives in place. Most secondary schools also had healthy schools initiatives and student leadership/mentoring programmes. Restorative justice approaches and home–school partnerships were less common, but a substantial number of schools were considering their introduction.
- Social workers were in place or being considered in a large majority of low-decile schools, but relatively few high-decile ones. Two-thirds of schools with 30 percent or more Māori

students were likely to be involved or considering Te Kōtahitanga, Te Kohua, or similar initiatives.

- School websites and intranets were common; videoconferencing was less common as yet (though more so in secondary schools) but around a third of schools were considering its introduction.
- Half of the schools had, or were considering the introduction of, a school bus (more common in rural schools). Secondary schools were more likely to have an after-school programme, and to share classes or teachers with other schools, though less than a fifth currently share classes or teachers with other schools.
- Most secondary teachers said they were teaching in one curriculum area only, which tended to be their area of expertise.
- Primary school principals said they funded on average one equivalent full-time teacher over their entitlement and secondary school principals funded an average of 2.5 teachers over entitlement.

The use of ICT for learning

- Use of ICT in primary and secondary schools had increased considerably since 2003. Nevertheless, teachers expressed different views about the value of ICT in learning.
- Primary teachers agreed that their students' use of ICT was helping their ICT skill development, and that it made learning more engaging/motivating. A majority felt ICT use was an essential and routine aspect of learning, yet nearly half said that ICT use in their classroom was occasional, and only for a specific project or purpose. A third of primary teachers said that student use of ICT did not happen, due to inadequate equipment.
- Secondary teachers were generally less enthusiastic than primary teachers about the benefits of ICT. A lower percentage said that it was helping ICT skill development and that it made learning more engaging or motivating; a higher proportion said that their use of ICT was only occasional.
- Half of primary and secondary teachers saw the potential for ICT to help students gain a deeper understanding of what they were learning. At least as many felt that ICT would help students integrate knowledge from more than one subject, but fewer thought that it would give students insights into how they learn.
- The most common uses of ICT in the primary classroom were for creating printed documents, using interactive games/exercises, and looking at websites or other information sources suggested by the teacher. As students grew older, they were less likely to use ICT for interactive games and exercises, and more likely to use it for independent research.
- The greatest constraints on ICT use in secondary schools were lack of resources or equipment. Female teachers were more concerned than male teachers about their own skill level and lack of knowledge. Younger teachers were more confident about using ICT.

Professional learning and achievement

- Primary principals had taken part in a wide range of professional development (PD) activities with their staff, and most of this training was valued highly. Nevertheless, half or more schools had *not* had training on key areas such as literacy, the key competencies, and positive approaches to student behaviour. Only one-third of principals said that their school could afford the PD it needed.
- Compared with 2003, secondary school teachers were more positive about sharing ideas and peer observation, indicating a growing openness between colleagues. Informal exchanges with colleagues had become the most common source of useful ideas for primary and secondary teachers.
- The majority of primary teachers valued highly their principal's leadership skills, yet less than half said that he or she gave them useful advice in teaching.
- Teachers generally had high regard for their colleagues (despite doubts about everyone pulling their weight), and a positive view of most aspects of school culture. However, views on career progression were mixed, and only a minority felt that there was enough time for working and planning together.
- Primary principals rated highly their curriculum-related achievements during the past three years. Over 80 percent said that they had made improvements, or sustained an already high level, in each of nine key areas. Secondary school principals were less positive, with (in most cases) a substantial number saying they had yet to achieve their desired level.
- Teachers from both sectors were positive about their recent achievements, with a large majority identifying an increase in their own knowledge or skills.

Innovation and constraints

- Responses in both sectors reflected the growing use of target setting and assessment for learning. Since 2003, there has been a move towards students taking greater responsibility for monitoring their own learning.
- Students in primary schools were more likely to be involved in target setting, peer review, and self-assessment of learning than those in secondary schools. Teachers from high-decile primary schools were three times as likely to report student involvement as those in low-decile schools.
- On the whole, teachers were positive about new initiatives in the school, but only one in five felt that they had enough release time to plan and implement change.
- The main constraints to innovation related to time, money, and staffing levels. Lack of staff expertise, commitment, and energy were also mentioned by principals.
- For teachers, lack of time was the biggest barrier to curriculum change, followed by class size or diversity, and lack of teaching resources.

Views on national standards

- Primary principals and teachers were strongly against the idea of government-set minimum standards of achievement for students, but around a third of trustees were in favour.
- Secondary sector responses were similar, except that teachers were on balance just in favour of the idea.
- Responses were in general more positive than those obtained in 2003; more stakeholders said yes to national standards, although more primary teachers also said no.
- However, a very common response from all stakeholder groups was still "it depends": on the standards, how they were measured, or how the information was used.

1. Introduction

In 1989, NZCER conducted a national survey of primary and intermediate schools, designed to assess the impact of the recent education reforms. The survey has been repeated periodically since that date, and in 2003 secondary schools were included for the first time.[1] These wide-ranging surveys, in a nationally representative sample of schools, are actually four surveys in one because there is a version each for principals, teachers, school trustees, and parents. The next cycle of NZCER national surveys took place in secondary schools in mid-2006 and in primary schools in mid-2007.

As before, the questionnaires were extensive, covering a wide range of topics. Findings from the secondary survey have already been used in a number of thematic NZCER publications, dealing with the NCEA (Hipkins, 2007a), school governance (Wylie, 2007), and planning and reporting (Hipkins, Joyce, & Wylie, 2007). A summary of key findings from the primary survey is available on the Internet (http://www.nzcer.org.nz/pdfs/15870.pdf).

Findings from both primary and secondary surveys are reported here, and in a parallel report which details responses relating to resources, culture, and relationships between the various groups of key stakeholders (the board of trustees, parents, the community, other schools, and government agencies). This report covers matters relating to the curriculum, assessment, and the use of ICT. Comparisons are made, as appropriate, between the primary and secondary sectors, and between the four different groups surveyed; reference is also made to the 2003 findings, in order to identify changes which have taken place in the intervening three or four years.

The curriculum context for the surveys

During the time between 2003 and the more recent surveys, the Ministry of Education (MOE) carried out extensive consultation work as the national curriculum was revised. It was published in draft form (Ministry of Education, 2006a) after the secondary survey and before the primary one.

The New Zealand Curriculum (Ministry of Education, 2007) was published just after the primary survey. In contrast with the previous curriculum, which set out what students were expected to know and to be able to do, the function of the revised curriculum is "to set the direction for student learning and to provide guidance for schools as they design and review their curriculum"

[1] A parallel series of national surveys was begun for early childhood education services in 2003, with the second survey in this series carried out in late 2007.

(Ministry of Education, 2007, p. 6). *The New Zealand Curriculum* is deliberately not prescriptive; it provides a "framework and common direction for schools", but gives them "the scope, flexibility and authority they need to design and shape their curriculum so that teaching and learning is meaningful and beneficial to their particular communities of students" (Ministry of Education, 2007, p. 37).

The curriculum document outlines a vision, principles, and values, five key competencies (KCs) which are regarded as necessary for living and lifelong learning, and eight learning areas which form the basis of a broad general education. The curriculum document includes a section on effective pedagogy, outlining the teaching approaches which will help students learn most effectively. It also outlines the potential benefits of e-learning, and encourages schools to explore "not only how ICT can supplement traditional ways of teaching but also how it can open up new and different ways of learning" (Ministry of Education, 2007, p. 36).

It is for schools to design a curriculum which reflects the principles of *The New Zealand Curriculum* while addressing the particular needs, interests, and circumstances of their students and community. What young people learn in school will include not just the "official" school curriculum, but also the so-called "hidden curriculum", comprising the basic attitudes and abilities valued by society. As Riegle (n.d.) has pointed out, the hidden curriculum of the 21st century (the "Information Age") is very different from that of the 20th century (the "Industrial Age"). The values demanded by the information age include self-reliance, communication, cleverness, and creativity. Because knowledge is expanding so rapidly, memorising large numbers of facts is no longer the measure of success, while problem solving, the ability to think imaginatively, and the ability to continue learning throughout life are now essential skills. The recognition of this change is reflected in the importance given to the key competencies, the principles, and the values which underpin the revised Curriculum.

The structure of the report

Chapter 2 outlines the methodology, and gives details of the sample surveyed. The following eight chapters report the substantive findings relating to the curriculum, assessment, and use of ICT. Chapters 3 and 4 report on curriculum priorities in the primary and secondary school respectively. Chapter 5 examines other initiatives that impact on the curriculum, while Chapter 6 looks at innovation in the use of ICT in learning. Chapter 7 looks at innovation more generally, and the factors which enable teachers to innovate successfully; Chapter 8 looks at barriers to innovation. Chapter 9 examines the extent to which students take responsibility for their own learning, and Chapter 10 looks at some accountability issues. Finally, Chapter 11 provides a summary and reflections on the meaning of the survey findings for education in New Zealand.

2. Methodology

NZCER's national surveys are carried out at periodic intervals. There are four different surveys in any one set—for principals, teachers, trustees, and parents. Each set of surveys is tailored to either early childhood, primary, or secondary education. Use of at least some repeat questions allows changes over time to be documented. Similarly, where relevant, the same item may be used to compare responses at different stages of education; for example, primary compared to secondary.

Questions organised around two key themes inform the teacher responses, both primary and secondary, reported in the sections that follow: curriculum and assessment; ICT; and learning. Principals answered questions related to school-wide learning and leadership; primary principals also answered questions related to innovations and change, and secondary principals had a group of questions on curriculum, assessment, and ICT. Responses to questions from other themes are included as appropriate. Copies of the survey questionnaires are available on request from NZCER.

The national survey sample

Secondary schools

Principals of all state and state-integrated secondary schools were invited to participate in the 2006 national survey.[2] In all these schools, one in eight teachers were randomly invited to participate, with questionnaires distributed with the help of the Post-Primary Teachers' Association (PPTA) representative and individually returned (or not) to preserve teacher anonymity. Responding principals were broadly representative of secondary schools nationwide, while responses from very large main urban schools were somewhat over-represented in the teacher sample. (Appendix A gives a demographic breakdown for a more detailed summary of demographic data see Hipkins, Joyce, et al., 2007.) Response rates from the principals were particularly pleasing (62 percent of all state and state-integrated secondary principals, compared with 48 percent of a smaller sample in 2003). Forty percent of the teacher sample responded, compared with 48 percent in 2003—a small decrease, perhaps because we had no follow-up mechanism in 2006.

[2] The NZCER 2003 Secondary National Survey was based on a random sample of 200 secondary schools, stratified by roll size and decile.

Every board of trustees (BOT) chair was invited to respond, and to invite one other trustee to take part (someone who might be expected to have a differing viewpoint from their own). Again, each trustee returned their completed questionnaire individually. The response rate was 44 percent (278 of 630 trustees).

Parents from a representative subsample of 27 schools were surveyed, and completed responses received from 708 (a response rate of 47 percent). More than four in five of the parents (82 percent) were female.

Primary schools

In June 2007, the primary questionnaires were sent to a representative sample of 351 New Zealand primary and intermediate schools. Response rates were 56 percent for principals, 48 percent for teachers, and 47 percent for trustees and parents. The responses were generally representative of the national school characteristics, with some over-representation of decile 9–10 schools and intermediate schools. As for the secondary survey the year before there was an over-representation of larger and urban schools among responding teachers (because the larger the school, the more teachers we sampled). A full demographic breakdown is provided in Appendix B.

Trustees and parents were surveyed in primary schools using the same approach as in secondary schools (see above). Responses were received from 329 trustees (a response rate of 47 percent) and 754 parents from 36 schools (also a response rate of 47 percent).

Analysis of data

Many of the survey questions were closed, either with boxes to tick or a Likert scale to complete. Frequency responses are reported for all these questions. Where closed questions were left blank, responses were recorded as "missing data". Where the frequencies of such responses were unusually high, this is reported.

All closed responses were cross-tabulated with a set of school characteristics—size, location, socioeconomic decile rating, and school authority type (state or state-integrated). It is worth noting that some of these school characteristics overlap, particularly the characteristics of low-decile ranking and small size for schools. Cross-tabulations were done using SAS/STAT® software, and results tested for significance using chi-square tests. Only differences significant at the $p < 0.05$ level are reported. 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 arbitrarily in random samples. Tests of significance do not imply causal relationships, simply statistical association.

Because some questions allowed multiple answers, or because figures have been rounded to whole numbers, totals in some tables (reported in percentages) may add up to more (or less) than 100 percent.

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. In the report, the term "trend" refers to differences which were just above the $p < 0.05$ level, where a larger sample might have revealed them to be significant.

Reporting to respondents

Each of the schools which participated in the survey was sent a thematic summary of the findings. In addition, the subset of schools which supplied a parent sample was sent a summary of parent responses which compared the views of individual parents from their school with those of the total sample. It was not possible to provide tailor-made summaries of teacher and trustee views, as the numbers were too small to do this while preserving confidentiality.

3. Curriculum priorities in the primary school

This chapter reports primary school priorities and plans for curriculum delivery. The snapshot will be of particular interest because it was taken after the draft version of the revised New Zealand curriculum was released, but before the final document was published. Traditionally, the primary school curriculum has placed its main cognitive emphasis on the development of students who are literate and numerate, especially in Years 1–4, and this emphasis continues with the revised Curriculum. However, there is a change to the perceived requirement to provide comprehensive coverage across all the learning areas. Schools are now encouraged to design a local curriculum, within the framework provided by the national document, ensuring that this meets the needs of their particular students. Other substantive changes, as already noted in the introduction, include a focus on key competencies and "learning to learn" as one of the underpinning curriculum principles (Ministry of Education, 2007, p. 9).

In the light of these developments, this chapter covers:

- primary school principals' curriculum priorities for 2007, the initiatives they were considering for future implementation, and how their priorities had changed since 2003
- primary teachers' curriculum priorities, and their perceptions of the impact of the revised New Zealand curriculum
- the extent to which parents of primary school students were aware of the revised New Zealand curriculum
- what principals, teachers, trustees, and parents perceived to be the main curriculum-related issues facing primary schools.

3.1 Primary principals' priorities for 2007

The first table in this section shows the aspects of curriculum where primary school principals said they were putting their *main* energy and focus in 2007.

It is not surprising that mathematics, reading, and writing dominate, given that the development of basic literacy and numeracy is seen as the core work of primary schools. These two areas (along with regular physical activity) are given specific priority in the National Administration Guidelines (NAGs) that set out the legal requirements of schools, and that are included in every Education Review Office (ERO) school review. These two curriculum areas have been given priority in MOE-funded PD in recent years, and also have assessment tools that allow schools to make reliable comparisons of their students' progress against national norms (Hipkins, Joyce, et al., 2007). In 2003, when the planning and reporting policy that requires schools to set annual

targets for student performance and report against them was still bedding in, numeracy was the most of frequently cited curriculum area for attention (52 percent, with 15 percent of principals identifying mathematics—these were asked separately in 2003).[3] Similarly, literacy (49 percent) and English (25 percent) were among the top-ranking 2003 priorities, albeit at lower levels than in 2007.

Table 1 **Primary principals' curriculum emphases in 2007**

Curriculum area	(*n* = 196) %
Mathematics	69
Reading	68
Writing	60
More use of formative assessment/assessment for learning	54
Using more inquiry learning	53
Use of ICT	50
Getting to grips with the new draft curriculum	26
Engaging parents in their children's learning	22
The new key competencies	22
Physical activity/health	21
The arts	6
Social studies	3
Science	2

NB: Percentages add to more than 100 because multiple responses were possible.

We did not ask about inquiry learning in 2003 so no comparisons can be made for that item. It was added to the 2007 survey because research in so-called "early adopter" schools found that this type of pedagogy is increasingly being seen as one means of introducing key competencies into the school curriculum (Boyd & Watson, 2006). In the light of this finding, it is interesting that just over half the surveyed schools were considering making *greater* use of it in 2007 and, as Figure 1 shows, 68 percent of schools said they already used some version of inquiry learning, with a further 26 percent considering doing so.

Influences other than the introduction of the revised curriculum may well be in play because only a quarter of the principals said that getting to grips with the draft curriculum (26 percent), and the key competencies within it (22 percent), were priorities for 2007. (However, more schools were considering making the key competencies a future priority—see Figure 1.) It is likely that an emphasis on inquiry models in many ICT clusters has also been a contributing influence. Congruent with this push for attention to the use of ICT by clusters of schools, the use of ICT as a

[3] Findings from the 2003 primary survey cited in this report have not been published previously.

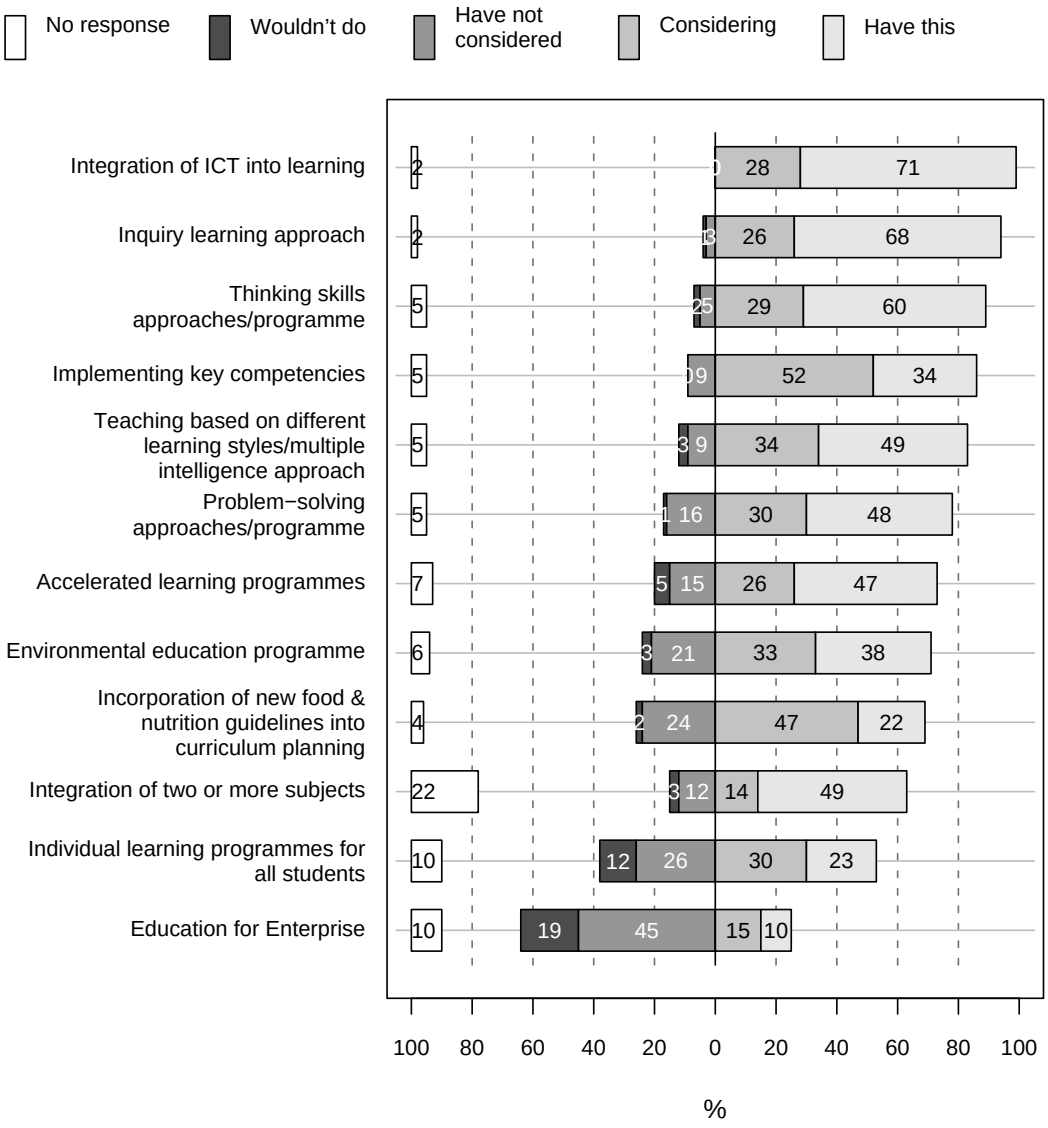
curriculum focus increased from 37 percent of schools in 2003 to 50 percent of schools in 2007. It is also interesting that the teaching of physical activity and health rated similar levels of attention to the curriculum (21 percent), given that policy work in this area had a high profile with the launch of the Mission On initiative in late 2006 (Ministry of Education, 2006b). Again, we see the influence of national initiatives in the ongoing priorities reported next.

High-decile primary schools were more likely to identify the key competencies as a main focus (35 percent, compared with 19 percent of mid-decile and 13 percent of low-decile schools). On the other hand, low-decile schools were more likely to focus on engaging parents in their children's learning (44 percent, compared with 20 percent of mid-decile and 15 percent of high-decile schools). This greater emphasis on engaging parents in their children's learning in low-decile schools is likely to reflect the growing awareness of the importance of such support for children's achievement and the need for schools in low-income areas to make additional efforts to encourage it, and some government funding being available for home–school partnerships.

Looking ahead—priorities for ongoing curriculum innovation

In addition to the focus on their current curriculum-area priorities, primary principals responded to a set of items about *prospective* curriculum initiatives. Inquiry learning and integration of ICT into learning have been discussed above. What is interesting here is that most of the schools that did not already have initiatives in these areas were considering implementing them. Note that initiatives being considered by the greatest number of principals were implementing the key competencies (52 percent) and the incorporation of the, then newly released, food and nutrition guidelines into curriculum planning (47 percent).

Figure 1 **Primary principals' priorities for curriculum initiatives**



Negative or nil responses are also interesting. Education for Enterprise was least likely to be on school horizons, with three-quarters of all the primary principals (74 percent) saying they had not considered it, would not do it, or giving no answer. The next least popular idea was the production of individual learning programmes for all students, with nearly half the principals (46 percent) saying they had not considered these, would not implement them, or giving no answer. Note that 22 percent of them did not respond to the item on curriculum integration—more than twice as many as for any other item. Why this should be is not clear, particularly as it was the potential curriculum priority most frequently mentioned by teachers responding to the survey.

Principals of high-decile schools were more likely to report that they already had thinking-skills programmes, inquiry learning approaches, and ICT integrated into learning.

The number of initiatives that primary schools were already involved in was summed, and used as the dependent variable in a regression analysis to determine the key factors associated with the take-up of initiatives. When other variables were taken into account, the one significant factor associated with the take-up of curriculum initiatives was gender: female principals were likely to be involved in more initiatives than male principals.

Changes in priorities over time

The next table compares existing and prospective curriculum initiatives for items that could be matched from the 2003 to the 2007 primary-principal surveys. Introduction of key competencies was a new item in 2007, and therefore could not be directly matched, but the large increase in attention to complex skills (thinking, problem solving) and self-awareness of learning (learning styles, multiple intelligences) could arguably be seen as linked to this aspect of the revised national curriculum framework (Hipkins, 2006). The increased attention to environmental education could reflect a range of influences, including strong local body initiatives in many places, especially in relation to the health of waterways, an emphasis on sustainability, supported by a School Support Services (SSS) initiative[4] in this area, and again, the impact of the key competencies, which encourage schools to find rich contexts for active participation and learning inquiries.

For all of the comparable items, 2007 figures are much higher than those for 2003, but this is likely to also reflect a difference in the way principals were asked to respond to the question. In both years the question was "Please indicate which of the following the school has, or is in the process of developing". In 2003, each item had a single tick box, but in 2007 there was a choice of four, to indicate "Have this", "Considering", "Have not considered", or "Wouldn't do". Table 2 below shows those who said they already had an initiative, or were considering it, in 2007, compared with those who ticked the box in 2003 to indicate they had or were in the process of developing it. But clearly, "considering" is not the same as "being in the process of developing", so it is not surprising that the 2007 figures are higher.

[4] School Support Services contracts with universities are funded by the MOE to provide national and regionally targeted PD and support to meet schools' identified needs.

Table 2 **A comparison of primary principals' curriculum priorities in 2003 and 2007**

Curriculum initiatives	2003 (*n* = 254) %	2007 (*n* = 196) %
Thinking skills approaches/programme	43	89
Teaching based on different learning styles/multiple-intelligence approach	39	83
Problem-solving approaches/programme	47	78
Accelerated learning programme	43	73
Environmental education programme	36	70
Individual learning programmes for all students	18	53
Other	2	8

NB: Percentages add to more than 100 because multiple responses were possible.

An approach to pedagogy known as "personalising learning" was introduced to schools in 2007 (Maharey, n.d.), and *The New Zealand Curriculum* includes a new section on effective pedagogy (Ministry of Education, 2007, pp. 34–36). While the personalising learning initiative was *not* intended to signal individual teacher planning for each child, anecdotal episodes suggest it was interpreted that way in some cases. From 2005, an addition to the NAGs made it mandatory for each BOT to show how it was meeting the needs of gifted and talented students. This could also have been a stimulus for increased interest in individual learning programmes.

Without further research it is not possible to know what exactly influenced the marked increase in interest in both individual learning programmes and accelerated learning. Given the high additional workload these initiatives imply for teachers (without necessarily contributing to the balancing intent that students are strengthened in their abilities to manage themselves as ongoing learners), the questions these findings raise could be worthy of further attention. How do teachers understand concepts such as personalising learning to make it more student-centred? What does "meeting learning needs" (of every student) mean to them and how do they see this ideal being enacted, if at all?

3.2 Innovation from the teachers' perspectives

We turn now to the curriculum priorities of the primary school teachers. Principals take a more global view of the school, but individual teachers within a school may or may not value the same things. Figure 2 shows the teachers' thinking about curriculum initiatives.

Integrating two or more curriculum areas was the top-rating item for teachers, with nearly all of them saying they already did this or were considering doing so (94 percent). As we shall shortly see, this was the item most frequently mentioned when teachers were asked how the revised New Zealand Curriculum might make a difference to their teaching. Their views stand in contrast to those of principals, fewer of whom saw integration as a curriculum priority (63 percent).

Integration implies some streamlining, and perhaps a reduction in curriculum "coverage" by eliminating areas of potential duplication. Congruent with their integration response, "more depth on fewer topics" was seen as a priority by 90 percent of the teachers. Principals were not asked about this. It may be that principals were more likely to think about a structured form of integration, built into planning in a formal way, while teachers were perhaps more likely to think about what happens in the teaching moment. Again, we cannot know for sure without further investigation.

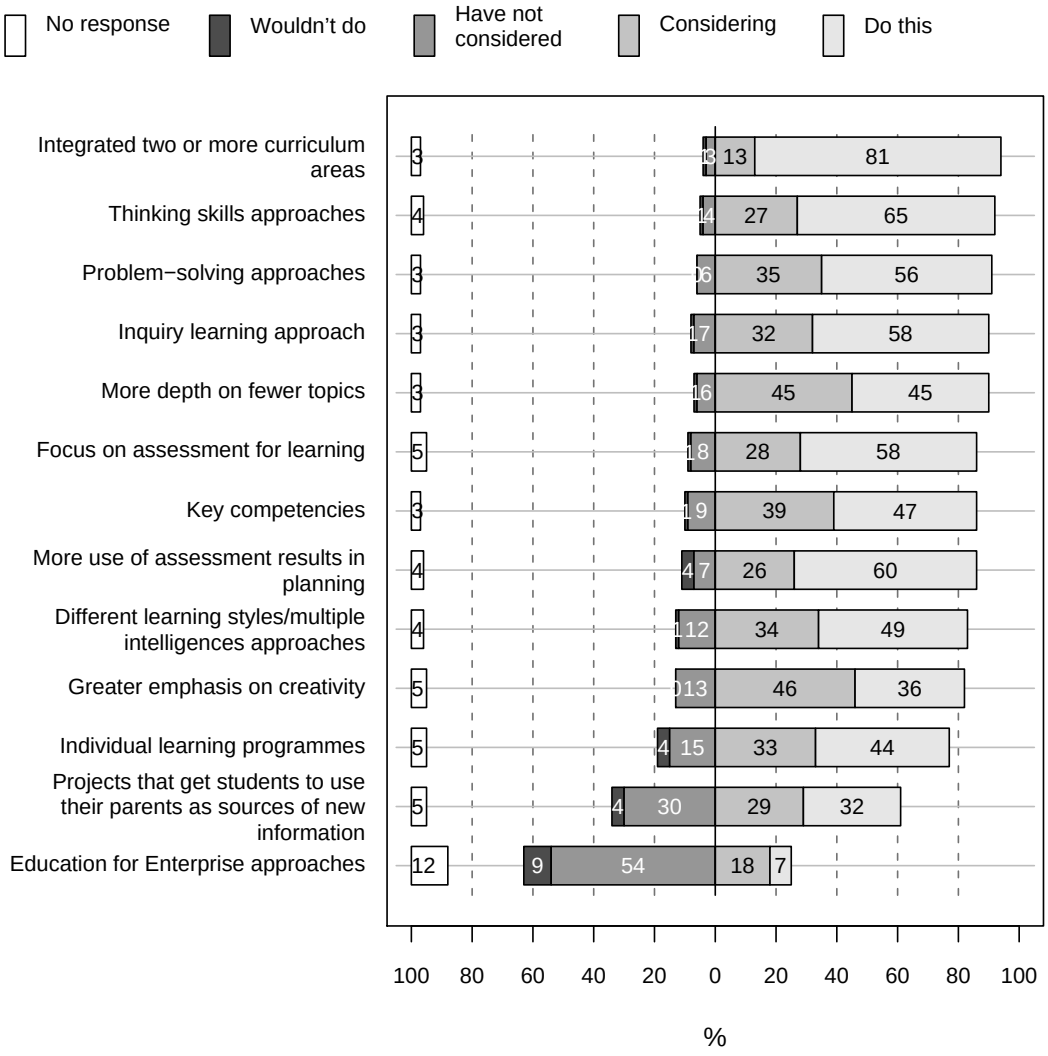
When considering aspects of the curriculum that potentially related to the introduction of key competencies, the similarities between teacher and principal views were more evident. For both groups, the introduction of the key competencies was seen as a priority by 86 percent. The pattern holds for: thinking skills (92 percent of teachers, 89 percent of principals); inquiry learning approaches (90 percent of teachers, 94 percent of principals); learning styles/multiple-intelligences (83 percent of teachers and principals); and to a slightly lesser extent for problem-solving approaches (91 percent of teachers, 78 percent of principals). These strong similarities could be related to other research that shows "early adopter" schools began their implementation of the new curriculum by initiating shared conversations about what it would mean for them as a school community (Boyd & Watson, 2006; Hipkins, Roberts, & Bolstad, 2007). Another possible unifying influence is the increasing use of "whole-school" models of PD in recent years. Whatever the stimulus, it seems that teachers and principals are, by and large, thinking about and valuing the same sorts of curriculum initiatives.

Most teachers also said they already had, or were considering, a greater emphasis on creativity (82 percent; this item was not included in the principal survey). Given the policy emphasis on home–school partnerships and the potential for rich links to the key competency "participating and contributing", it is interesting that fewer teachers (62 percent) prioritised the use of projects that get students to use their parents as sources of new information.

Teachers' responses confirmed the findings from principals (above) that high-decile schools were more likely to be already involved in inquiry learning and thinking skills approaches, though in this case the differences were relatively small (but significant). Teachers from high-decile schools were also more likely to say that they did projects involving parents as sources of information.

Two items focused on formative assessment were included in the teacher survey but not the principal survey. As Figure 2 shows, 86 percent of teachers said they already used or were considering using assessment for learning approaches, and making greater use of assessment results in their planning. There were differences here by gender: 62 percent of female teachers, compared to 44 percent of male teachers, were already making more use of assessment results in planning; in terms of assessment for learning, the proportions were 60 percent and 44 percent respectively.

Figure 2 **Primary teachers' priorities for curriculum initiatives**



Note that primary teachers were even less interested in Education for Enterprise (25 percent) than their principals (35 percent) and this was the bottom-ranked item in both surveys. It may be that some teachers (and principals) misunderstand the nature of the initiative, seeing it perhaps as an additional business-focused area of study, rather than an approach which is intended to make links between learning and the real world, and foster skills such as innovation, creativity and problem solving (see http://tki.org.nz./r/eduation_for_enterprise). Enterprise is also mentioned in *The New Zealand Curriculum* as one of the future-focused themes that should be addressed in the school's curriculum (Ministry of Education, 2007, p. 9).

There is some evidence to suggest that teachers do see Education for Enterprise as something more suitable for older students, as it was more common in intermediate schools (36 percent) than in contributing (24 percent) and full primary (21 percent) schools. It was even more common in secondary schools (see further Chapter 4).

However, from the more positive responses of teachers (and principals—see Figure 1) to the other items in this question, it is clear that schools are already engaged in a large number of initiatives, and possibly feel unable to take on yet more.

Primary teachers' perceptions of the impact of the revised national curriculum

If some items suggested principals were looking ahead to aspects of the revised curriculum such as the key competencies, were teachers seeing the same opportunities (or challenges) on the horizon? One question in the teacher survey asked how the revised national curriculum might make a difference to teaching. The next table shows that around half the teachers saw possibilities for curriculum integration, perhaps because the revised curriculum has been presented as one document, compared to the staggered release process employed for separate learning area documents of the previous curriculum revision.

In view of the Curriculum Stocktake imperative to streamline the curriculum and reduce the number of achievement objectives (Ministry of Education, 2002), it is encouraging that around half the teachers already saw that they would be able to prioritise and focus on doing fewer things, and very few thought they would need to add more on top of what they already did. However, nearly a third anticipated that it would not make much difference,[5] which suggests challenges for those charged with providing advice and guidance, and supporting teacher professional learning over the two-year implementation period. Teachers aged over 50 were somewhat more likely to say that the curriculum would support them in integrating different curriculum areas (58 percent, compared with 49 percent aged 40–49 and 44 percent under 40); but they were also somewhat more likely to say that it would make no difference to their teaching (36 percent, compared with 27 percent aged 40–49 and 28 percent aged under 40).

Table 3 **Primary teachers' views of the likely impact of the revised national curriculum**

Views	(*n* = 912) %
It will give me support to integrate different curriculum areas and skills development	50
It will allow me to focus on fewer things	47
Not much difference to what I'm currently doing	30
Not sure	20
It will be hard trying to fit new things in	7

NB: Percentages add to more than 100 because multiple responses were possible.

Teachers were also asked what they thought schools would need or need to do in order to make the most of the new draft curriculum.

[5] This view was more common among teachers in small schools (40 percent) compared with those in medium (26 percent) and large schools (32 percent).

Almost 30 percent of teachers said that they would need to be able to discuss and consult with colleagues, but an almost equal number felt that support from experts would be needed. One in five teachers specifically mentioned the need for release time to be able to plan and prepare; some were clearly feeling under pressure, and said that they would need to be allowed to "let go" of other initiatives in order to make the time needed for the new curriculum. Other responses included consulting with community/ensure curriculum meets the vision, character, and needs of the school, and review current practice/policy concerning the curriculum (11 percent each).

Changes in primary teachers' curriculum priorities since 2003

It is not possible to make a direct comparison of most curriculum items in the teacher surveys because many of the 2003 items were replaced in the 2007 survey with different items, and the 2007 survey asked about actual initiatives as well as prospective changes. These changes to the survey itself reflect something of the changes in curriculum thinking at the policy level across the three years. Congruent with the structure of the previous national curriculum, the 2003 survey included items focused on the learning areas as separate entities—for example, "a greater emphasis on science" and so on. As we have seen, the 2007 items focused more on links across curriculum areas, including on the pedagogy that could be used within any or all of them. Bearing in mind that we do not know the extent to which these things were already happening in 2003, the next table compares teachers' *aspirations* for change—that is, the "considering doing this" response in 2007, with the equivalent "would like to introduce" responses from 2003.

Table 4 **A comparison of primary teachers' curriculum aspirations in 2003 and 2007**

Curriculum initiatives	2003 (*n* = 431) %	2007 (*n* = 912) %
Greater emphasis on creativity	33	46
More depth in fewer topics	47	45
Thinking skills (2007)/Critical thinking (2003)	35	27
Integration of learning areas	31	13

NB: Percentages add to more than 100 because multiple responses were possible.

The similar figures could imply that achieving greater depth in fewer topics has continued to be an aspiration rather than a reality for almost half of the teachers surveyed. However, it is important to note that those surveyed in 2003 were not asked whether they had achieved that goal, while 45 percent of the 2007 sample said that they had already done so. It is possible, therefore, that some of those who wished to introduce greater depth in 2003 had succeeded, and that more teachers are now aiming for that goal.

Fewer teachers aspired to introduce critical thinking skills in 2007, doubtless because 65 percent of them said they had already done so. Similarly, curriculum integration was seen as being well

underway by 2007 (81 percent of teachers had integrated two or more curriculum areas by this time).

3.3 Parents' awareness of the revised national curriculum

In mid-2007, just a quarter of the parent sample (26 percent) said they had heard about the revised national curriculum. One-third of this group (compared with one-sixth of the total parent sample) worked in the education sector. Parents of children at full primary (31 percent) and intermediate schools (29 percent) were more likely to be aware of the revised curriculum than parents of children at contributing schools (21 percent); parents of children at rural schools (36 percent) were more likely to know about it than parents of children at urban schools (24 percent).

Sources of information about the curriculum reported by parents who were aware of the revised curriculum were: the media (11 percent of all parents); a school newsletter (9 percent); their own occupation (4 percent); and a school meeting (3 percent). For a few parents, their child's teacher, other parents, friends, and involvement with the BOT were sources of information (all 2 percent).

Most of the parents who said they had heard about the curriculum were nevertheless unsure about its likely impact (34 percent), or were suspending judgement, saying it depended on what the school decided to do (31 percent); a further 7 percent did not respond. Twenty-two percent were more positive about potential impacts, saying the revised curriculum should enrich learning while a more sceptical 7 percent said they did not see that it would really change things.

Parents who worked in the education sector were less likely to say "not sure" (23 percent, compared with 41 percent of other parents) but more likely to say "it depends on what the school decides to do" (39 percent, compared with 25 percent). There was hardly any difference in the proportion saying that it should enrich learning, but parents who worked in the education sector were twice as likely to say that they did not anticipate changes (11 percent, compared with 5 percent).

Keeping these findings in perspective, just 6 percent of parents said they would like to have a greater say in the school's curriculum. With the exception of the health/PE learning area, this is not an aspect of school life where parents have traditionally been consulted. The intent that partnerships between home and school should be strengthened to more fully involve families in children's education may take time, patience, and careful strategic leadership to realise.

3.4 Perceptions of the major issues facing primary schools

All respondents were asked to indicate what they saw as the major issues facing their schools. Responses to items related to the curriculum, assessment, or ICT are shown in Table 5. It is interesting to compare the perceptions of different categories of respondents as to the relative

importance of issues facing the school. The items listed are only a subset of those included in the questionnaires (a long list of 20 plus items); for principals the major issue was not surprisingly funding (cited by 82 percent) but after that came property development (42 percent) and the items listed below. No other item was mentioned by more than 30 percent of principals.

Table 5 **Topics seen as major issues**

Topics	Principals (*n* = 196) %	Teachers (*n* = 912) %	Trustees (*n* = 329) %	Parents (*n* = 754) %
New curriculum	42	25	16	7
Student achievement	40	28	33	24
ICT	38	31	13	7
Using assessment data	36	NA	NA	NA
Assessment workload	36	43	24	NA
Assessment driving the curriculum	34	21	12	7

NA = item not included for this group.

Teachers' responses were similar; they, too, put funding at the top of the list, and were concerned about property development, but the items in Table 5 all rated high among their major issues. The proportion of teachers citing each item was smaller than the proportion of principals, except for assessment workload, which was teachers' second greatest concern after funding, no doubt because they bear the brunt of it. The only other item mentioned by more than 21 percent of teachers was student behaviour (29 percent), which ranked relatively low among principals' concerns.

Not surprisingly, trustees were also mainly concerned about funding and property management, but student achievement was their third biggest priority, and assessment workload also ranked high; they were less worried about the new curriculum and ICT. Similarly with parents, funding (53 percent) topped the list, followed by "keeping good teachers" (32 percent); student achievement was important to them, but the new curriculum and ICT were well down their list of priorities.

For most of the items shown in the table, principals were more concerned than teachers, who were more concerned than trustees, who in turn were more concerned than parents. The only exceptions to this pattern were student achievement (of more concern to trustees than teachers) and assessment workload (of more concern to teachers than principals). The latter is understandable given that it impacts directly on teachers' daily life. The former may seem surprising, but here we are talking about overall achievement of all the students in the school, which would naturally be an important issue for trustees, while teachers would probably focus more on fostering the achievement of their own students.

3.5 Summary

Mathematics, reading, and writing, traditionally the core business of primary schools and the priority areas for primary schools in the legislation within which schools work, remain the top curriculum priorities in 2007. In the light of the current emphasis on assessment for learning, this could be partly because these subjects are the ones where reliable assessment tools are most readily available. Getting to grips with the new draft curriculum, and introducing the key competencies, were identified by only a quarter of primary principals as areas where the school was putting its main energy and focus. However, a third of schools said that they had already introduced the key competencies, and half were considering their introduction.

A majority of schools had integrated ICT into learning and implemented inquiry learning and thinking skills approaches; nearly all others were considering their introduction. Of a range of initiatives, the least popular was Education for Enterprise; only one-quarter of schools had implemented it or were considering doing so.

Teachers were asked to respond to a similar item set, with reference to the curriculum that they themselves teach. Responses were in general fairly similar to principals'; the most notable difference related to integrating two or more curriculum areas—81 percent of teachers, but only 49 percent of principals, claimed that this had been done. Teachers were also more likely to say that they had already introduced the key competencies.

Half of the primary teachers felt that the revised New Zealand Curriculum would help them to integrate different curriculum areas and skills development; almost as many thought it would allow them to focus on fewer things. However, 30 percent said that it would not make much difference to what they were already doing.

A quarter of the parents surveyed had heard of the new curriculum, but most were unsure about its likely impact, or were adopting a "wait and see" approach. With the exception of student achievement, issues relating to the curriculum, assessment, and ICT were of less importance to parents and trustees than to principals and teachers.

4. Curriculum priorities in the secondary school

There are different organisational challenges to take into account when considering the implementation of the curriculum in secondary schools. Traditionally, these schools have organised the curriculum around discipline-based subjects that are timetabled into discrete "periods" or lessons of around an hour's length. Thus students tend to switch teachers and rooms several times in a day. By contrast, much of a student's day in the primary school is spent with the same teacher, in the same room.

Another key difference is that the curriculum of Years 11–13 has tended to be dominated by what teachers see as the requirements of assessment for qualifications, and they may focus on NCEA standards (or other examinations prescriptions such as Cambridge) *as* their curriculum. In any case, some subjects traditionally offered in the senior secondary school do not link in an unproblematic way to the eight learning areas of the revised New Zealand curriculum framework (Ministry of Education, 2007). It seems that, at this senior secondary level, curriculum development has largely happened *by default* as various summative assessment decisions have been made (Bolstad & Gilbert, 2008).

In this chapter, we report on:

- secondary school principals' priorities for curriculum innovation, and how these had changed since 2003
- secondary school teachers' curriculum priorities, how these compared with those of secondary principals and primary teachers, and to what extent they had changed since 2003
- what principals, teachers, trustees, and parents perceived to be the main curriculum-related issues facing secondary schools.

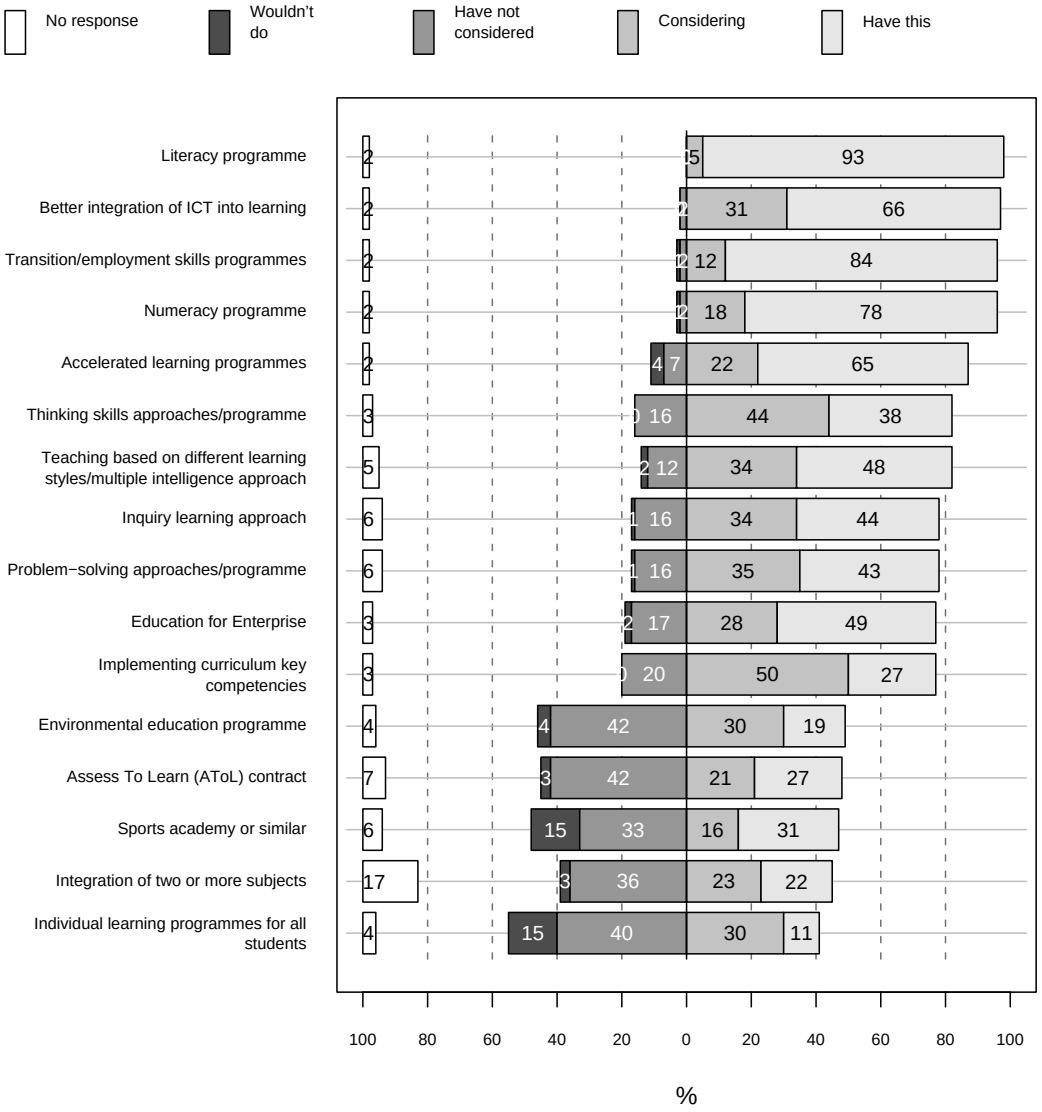
4.1 Secondary principals' priorities for curriculum innovation

In this somewhat different context, the secondary principals responded to a similar but larger item set than their primary colleagues. Whereas the development of literacy and numeracy is seen as integral to primary teachers' work, in the past these could well have been seen as additional to traditional teaching activities in many secondary subject areas, and hence as an innovation rather than business-as-usual. Secondary principals were also asked about involvement in the Assess To

Learn (AtoL)[6] project, and about programmes likely to be specific to the senior secondary school (transition/employment skills and sports academies or similar). Reference to the Food and Nutrition Guidelines was not included in the secondary survey because these were not released until 2007, after the secondary survey was carried out.

Responses to this item set are shown in Figure 3. These responses were made in 2006, a year before the primary survey and before the release of the draft version of the revised curriculum. However, work on the curriculum had been widely signalled, and at least some principals would have already been involved in consultation, via their professional associations.

Figure 3 **Secondary principals' priorities for curriculum initiatives**



[6] This is a MOE-funded PD programme provided by a number of contracted providers across the country, and customised for each school.

As Figure 3 shows, almost all of the few schools that did not yet have a literacy programme in 2006 were considering implementing one, and the picture was similar for numeracy, albeit with somewhat more schools still in the process of considering an initiative in this area. Other initiatives that were already implemented or being considered by almost all schools were better integration of ICT into learning, and transition or employment-skills programmes. Accelerated learning and thinking skills approaches also enjoyed wide support.

As in the primary survey, the most common nonresponse was to the item on curriculum integration.

Around half the principals said they either would not do, had not considered, or gave no response to five items: individual learning programmes (59 percent); integration of two or more subjects (56 percent); sports academy or similar (54 percent); AtoL (52 percent); and environmental education programmes (50 percent). Some of these are doubtless inter-related. For example, environmental education typically demands a level of curriculum integration because there are both science and social science aspects to take into account. The traditional timetable structure provides considerable structural and practical constraints to such integration in secondary schools.

The most negative response was for individual learning programmes for all students. Fifty-five percent of secondary principals said "not considered" or "would not do", compared with 38 percent of primary principals. In view of the School Plus aim to individualise learning pathways to appropriately meet the ongoing needs of all 16–18-year-olds (Ministry of Education, 2008), this finding raises some policy challenges.

The difference between primary and secondary schools in relation to views about individual learning programmes could relate to the fact that secondary schools are (on average) larger than primaries. However analysis of both primary and secondary responses by size of school roll did not provide clear evidence that size was a factor. Secondary schools have traditionally been curriculum-centred in their organisation. This may make it more difficult for them to refocus school structures in ways that place emphasis on documenting the needs of each student as an individual. If, for example, individual learning programmes are seen as requiring every teacher to prepare an individual plan for every student they teach, this would clearly be seen as unworkable by most teachers. A more manageable alternative, illustrated in the Education Review Office (ERO) report on engaging senior secondary students (Education Review Office, 2008) is to put in place overarching support and advice structures that keep track of each individual's progress and choices in relation to their longer term goals. Questions about such structures could be a more explicit focus in the next NZCER national survey.

Differences between groups

State schools were more likely than state-integrated schools to already have a sports academy (35 percent, compared with 10 percent) and transition/employment-skills programmes (89 percent, compared with 64 percent).

Rural schools (31 percent) and minor urban schools (35 percent) were less likely to have, or be considering, individual learning programmes for all students than main urban (41 percent) and secondary urban (55 percent) schools.

Mid-decile schools were more likely to have, or be considering, teaching based on different learning styles (86 percent) than either low- (73 percent) or high-decile schools (71 percent). However, there was a difference between the latter two groups, in that more than half of the high-decile schools already had teaching based on different learning styles (56 percent) and only 15 percent were considering it, while for low-decile schools the figures were 35 and 38 percent respectively.

High-decile schools were less likely to have, or be considering, AtoL contracts (35 percent, compared with 50 percent mid-decile and 54 percent low-decile schools).

The initiatives in which each secondary school was already involved were summed, and used as the dependent variable in a regression analysis designed to identify the key school- or teacher-level factors associated with innovation. When all other factors were taken into account, the one factor that emerged as significant was U-grade:[7] the higher the grade, the more initiatives they were likely to have.

Comparing primary and secondary principals' responses

Table 6 below compares primary and secondary principals' priorities for curriculum initiatives. Given that a year elapsed between the surveys, and that the contexts of primary and secondary schools are so different, there are some striking similarities in principals' curriculum priorities. Integration of ICT into learning, seeking to identify student learning approaches, and using problem-based approaches were particularly common.

[7] The U-grade of a school is its grade on a salary scale for principals: the higher the U-grade, the larger the size of the pupil roll.

Table 6 **A comparison of primary and secondary principals' priorities for curriculum initiatives**

Curriculum initiatives	Primary (*n* = 196) %	Secondary (*n* = 194) %
Integration of ICT into learning	98	96
Inquiry learning approach	94	77
Thinking skills approaches/programme	89	81
Implementing key competencies	86	77
Teaching based on different learning styles/multiple-intelligence approach	83	81
Problem-solving approaches/programme	78	77
Accelerated learning programmes	73	87
Environmental education programme	70	49
Integration of two or more subjects	64	44
Individual learning programmes for all students	53	41
Education for Enterprise	25	78

NB: Percentages add to more than 100 because multiple responses were possible.

Somewhat more primary principals than secondary were looking at inquiry learning, thinking skills, and implementing the key competencies, but the proportions are still high for secondary.

The items with high proportions in both secondary and primary tend to relate to "big picture" curriculum framing. They signal a focus on *doing* something with content (problem solving, thinking, etc.) that in turn implies changes in pedagogy, in all learning areas. Given that the secondary survey preceded the release of the curriculum draft, the trends shown here raise interesting questions about whether the revised New Zealand curriculum should be seen as leading change or as reflecting an impetus for more challenging teaching and learning that was already in train. A "co-construction" process was used to involve as many professionals as possible in the curriculum development, and it is likely that influences from the many discussions this entailed flowed in both directions.

Where patterns differ most are around three initiatives. Environmental education programmes and subject integration imply a degree of curriculum integration that can be organisationally easier to achieve in primary schools. Traditional timetabling practices of secondary schools can make integration a challenging exercise. Education for Enterprise, an initiative intended to foster generic attributes such as creativity, problem solving, and the disposition to think laterally about issues, enjoyed three times as much support in secondary schools as in primary schools. This is probably because it has been promoted most there in terms of resources and support, and has often found a home in technology, where students are required to create something for a client (Roberts, McDowall, & Cooper, 2008).

Comparing secondary school curriculum initiatives in 2003 and 2006

Comparing the secondary initiatives principals said were already a part of their school in 2006 with those in place in 2003, we see the fruits of several well-resourced PD initiatives. By 2006, almost all the schools had a literacy programme in place (see Table 7). Three times as many schools had numeracy programmes in place. Twice as many principals were reporting better integration of ICT with learning. As for primary schools, more items could not be matched because the direction of curriculum change has turned away from a specific focus on individual learning areas.

Table 7 **A comparison of secondary curriculum initiatives: 2003 and 2006**

Curriculum initiatives	2003 (*n* = 95)	2006 (*n* = 194)
Literacy programme	68	93
Numeracy	26	78
Integration of ICT into learning	35	66

NB: Percentages add to more than 100 because multiple responses were possible.

The widespread adoption of literacy programmes by 2006 is a significant finding. Wright (2007) observes that, for many secondary schools, the introduction of literacy across the curriculum opened up a new type of space for whole-school professional learning conversations, where previous PD was more likely to be have been curriculum-specific and as such involved smaller groups or individuals within the staff. However, Wright also cautions that implementation of whole-school literacy programmes has met with varying degrees of acceptance and hence sustainability in different schools. Her evaluation highlights the importance of professional leadership in creating an environment where goals for change are widely shared. Such issues are considered in Chapter 7 of this report.

Table 8 compares the further changes secondary principals wanted to make in 2003 with those they were considering making in 2006. As for the primary teacher comparison in the previous section, a caveat to this table is that the format of the question changed—we know the extent to which these things were already happening in 2006, but not in 2003.

Table 8 **A comparison of secondary principals' curriculum aspirations: 2003 and 2006**

Curriculum initiatives	2003 (*n* = 95)	2006 (*n* = 194)
Thinking skills approaches/programmes	33	44
Better integration of ICT into learning	28	31
Individual learning programmes for all students	22	30
Integration of two or more subjects	16	23

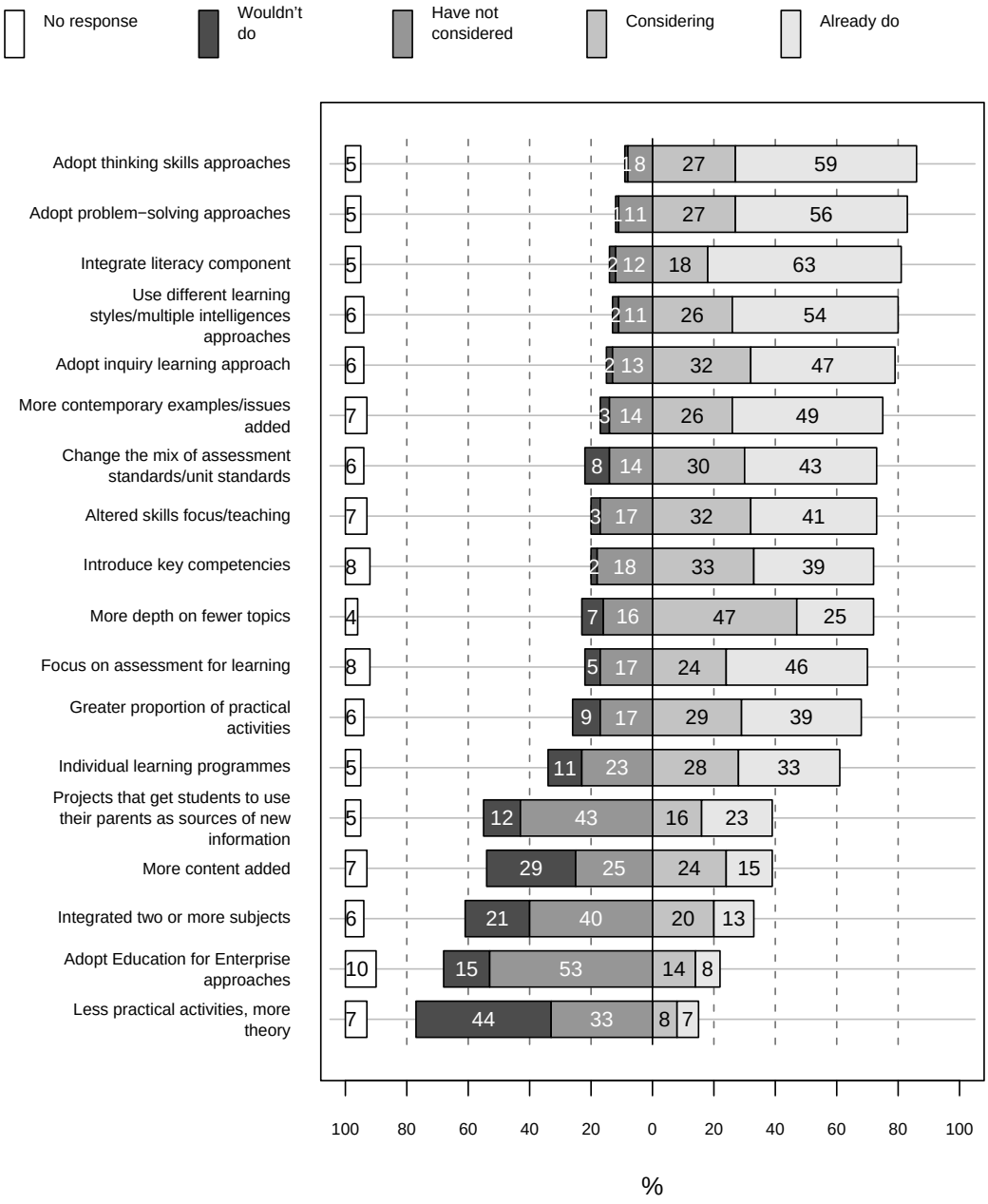
NB: Percentages add to more than 100 because multiple responses were possible.

Thinking skills were already attracting the interest of a third of the principals in 2003. Research carried out at the time of the staged implementation of the NCEA, which began in 2002, documented the impetus for teachers to give increased attention to the different quality of thinking required to achieve merit and excellence for achievement standards in science and mathematics (Hipkins & Neill, 2006), and the same influence doubtless applied in other curriculum areas. The incremental increase in prospective interest in 2006 is likely to reflect a continuation of this trend. It is also possible that in some cases early thinking about the impact of the revised curriculum influenced this response, particularly as "thinking" is explicitly named as a key competency.

4.2 Secondary teachers' curriculum thinking

The next figure shows secondary teachers' responses to various possible curriculum initiatives.

Figure 4 **Secondary teachers' priorities for curriculum initiatives**



When both current practice and aspirations are grouped together, it is interesting that the top-rated items all relate to changes in pedagogy that individual teachers perhaps have more leeway to implement regardless of what their colleagues are doing. Making changes to the "content" of the curriculum is more likely to need to be co-ordinated across a team, especially in larger schools where there are multiple classes at each level. Given the inclusion of the key competency *participating and contributing* in the revised curriculum, it is encouraging that the top-rating content item relates to the greater use of contemporary issues and examples. In fact, the introduction of key competencies was already happening or being actively considered by over

two-thirds of all responding teachers. Congruent with this focus, a similar proportion of teachers appeared to be moving away from content "coverage" for its own sake. Nearly half were considering more depth in fewer topic areas, and another quarter said they had already made this type of change. Just one-third of the teachers would like to, or had done, the opposite (more content added). Similar trends can be seen in the move to include more practical activities, with doing the opposite (less practical, more theory) the bottom-rated item of the set.

Differences between groups

There were clear differences in teachers' curriculum priorities according to gender; women, on the whole, seemed more willing to try out new ideas (cf. the finding reported in Chapter 3, that female principals of primary schools were likely to report school-level involvement in more initiatives). Thus female teachers were more likely than male teachers to be providing individual learning programmes (37 percent, compared with 26 percent), to base their teaching on different learning styles (62 percent, compared with 42 percent), to have increased discussion of contemporary examples/issues (56 percent, compared with 39 percent) and practical activities (45 percent, compared with 31 percent), and to have integrated the literacy component (69 percent, compared with 53 percent).

Not surprisingly, there were differences in curriculum priorities according to subject taught. Since there are gender differences in subject specialisms, it was possible that the differences in terms of curriculum priorities were actually influenced by subject taught, rather than gender. To test this hypothesis, a regression analysis was undertaken, which confirmed that both subject and gender are relevant in this context.

There were also differences according to age. Contrary perhaps to expectations, teachers aged less than 40 were less likely to have already introduced a number of the strategies listed: an altered skills focus; more contemporary examples; the key competencies; problem-solving and thinking skills approaches. They were more likely to say that they had not even considered implementing these changes. The difference with regard to the key competencies was particularly striking: only 26 percent of younger teachers said they were already doing this (compared with 44–45 percent of older groups), and 27 percent said they had not considered it (compared with 16 percent of teachers aged 40–49 and 14 percent of those aged 50 or over). On the other hand, although the numbers already including a greater proportion of practical activities were similar, a greater proportion of younger teachers said that they were considering this change (36 percent, compared with 29 percent of teachers aged 40–49 and 23 percent of those over 50). Other NZCER research suggests that changes influenced by the integration of key competencies with curriculum "content" can be quite subtle, and demand deep subject expertise (Hipkins, 2008). Teachers with more years of experience are thus more likely to be well placed to lead curriculum implementation initiatives. ERO has also noted the distribution of curriculum leadership across a number of more experienced teachers as a feature of schools that successfully engage senior secondary students (Education Review Office, 2008).

Teachers at rural schools were more likely to have introduced, or be considering the introduction of, individual learning programmes (78 percent, compared with 58 percent in the main urban schools). By contrast, the principals of such schools were less likely than other principals to say that they had done, or were considering, this. The difference likely reflects a tendency to smaller but multi-age classes in rural schools. Whether or not individual learning programmes are actual school policy, teachers may need to use them to meet the diverse needs of the students in any one class.

Two-thirds of the teachers had not considered E4E approaches, or would not adopt them, perhaps because these approaches tend to be aligned with specific subjects (such as economics) in the secondary school (see further below). The higher the school decile, the greater the proportion of teachers who took this view, ranging from 57 percent in decile 1–2 schools to 75 percent in decile 9–10 schools.

Only two other items had not been considered by more than 40 percent of respondents: assigning projects that require students to use parents as sources of information (43 percent), and integrating two or more subjects (40 percent).

A comparison of principal and teacher priorities

Whereas principals would have approached this item set with a whole-school perspective in mind, individual teachers were more likely to respond with their personal impressions and priorities. What differences in perspectives are revealed by comparing the two data sets for corresponding items? These are illustrated in Table 9.

Table 9 **A comparison of secondary principal and teacher priorities for curriculum initiatives**

Curriculum initiatives	Teachers (*n* = 818) %	Principals (*n* = 194) %
Thinking skills approaches/programme	86	82
Problem-solving approaches/programme	83	78
Integrate literacy component	81	98
Teaching based on different learning styles/multiple-intelligence approach	80	82
Inquiry learning approach	79	79
Implementing key competencies	72	77
Focus on assessment for learning (NB principal item worded as "AToL contract")	70	49
Individual learning programmes	51	41
Integration of two or more subjects	33	45
Education for Enterprise approaches [word "approaches" not included in principal item]	22	77

NB: Percentages add to more than 100 because multiple responses were possible.

As might be expected, the items that show the greatest difference are those where the principal might take a whole-school perspective and the teacher a subject-specific perspective—for example, Education for Enterprise. (Note, however, that teaching that fosters enterprising thinking can be integrated into other subjects and the wording of the teacher item was intended to reflect this possibility.) The wording of the item on assessment for learning could have influenced the lower frequency of principal responses as it referred explicitly to an AToL contract.

As in the primary school comparisons, the similarities here are more evident than the differences, and the rankings also convey a sense of shared priorities. Note, however, that almost all the principals think that literacy programmes are integrated across the school, compared with 81 percent of the teachers who saw them as integrated into their classroom programme. Principals were also more optimistic about the integration of two or more subjects, compared with teachers who perhaps did not see their own subject as integrated with others, and/or felt unable to make judgements about other curriculum areas.

A comparison of primary and secondary teacher responses

How do the priorities of secondary teachers compare with those of their primary colleagues? The next table shows what teachers reported they were already doing for all the items in common. (Note that items included in the 2006 secondary teacher survey but not in the 2007 primary teacher survey were: greater proportion of practical activities; less practical activities/more theory; more content added; altered skills focus/teaching; more contemporary examples/issues added; integrate literacy component; and change mix of assessment standards/unit standards.) The table comparing responses has been sorted by primary teacher frequencies because most of the innovations were reported more often by this group. Some of this difference reflects the relatively fewer obstacles to change in the primary sector (this is considered further in Chapter 8).

Table 10 **Comparing teachers' views of curriculum innovation in secondary and primary schools**

Type of innovation	Primary (*n* = 912) %	Secondary (*n* = 818) %
Integrate two or more curriculum areas/subjects	93	33
Thinking skills approaches	92	86
Focus on assessment for learning	92	70
Problem-solving approaches	91	83
Inquiry learning approach	90	79
More depth on fewer topics	89	72
Key competencies	87	72
Different learning styles/multiple-intelligence approaches	83	80
Individual learning programmes	76	61
Projects that get students to use their parents as sources of information	61	39
Education for Enterprise approaches	25	22

NB: Percentages add to more than 100 because multiple responses were possible.

As might be expected in view of the comparisons already reported, the similarities between sectors here are more striking than the differences. Teachers are interested in, or already implementing, very similar initiatives, albeit at a slightly lower frequency in secondary schools. Curriculum integration is an exception to this pattern. Integration across curriculum areas is easier to arrange where one teacher is responsible for multiple areas, and has autonomy to schedule class time as they wish. The organisation of secondary schools into subject-specific time slots makes integration a much more organisationally challenging proposition.

The only other substantive difference is for "projects that get students to use their parents as sources of information". The greater use of this strategy in primary schools could reflect the fact that primary teachers tend to have more (informal) contact with their students' parents.

It is encouraging that a high proportion of both primary and secondary teachers report involvement in so many initiatives. However, this optimistic picture should perhaps be tempered by the limitation that the survey research does not reveal any detail of what innovations such as implementation of key competencies actually mean to each respondent. Work with teachers elsewhere has suggested that the wide and general nature of the key competencies can lead to "we already do that" responses where no substantive change has actually taken place (see, for example, Reid, 2006). More detailed curriculum implementation projects will doubtless shed further light on such questions.

Changes in secondary teachers' curriculum thinking over time

We next compare changes teachers wanted to make in 2003 with those they were considering making in 2006, for all the items in common between the two surveys (see Table 11 below). Again, a caveat to this table is that the format of the question changed—we do not know the extent to which these things were already happening in 2003 whereas we do for the 2006 data.

The 2006 responses reveal that, compared with 2003, double the number of secondary teachers were considering ways to reduce content so that they could introduce more depth in the topics they taught. In the previous section we saw that the same proportion of their primary colleagues were also considering such a change in 2007—but in their case the frequency was relatively unchanged from 2003 (refer to Table 4). For secondary teachers, this represents an important shift in focus away from a quantitative "coverage" view of curriculum delivery, to a consideration of a qualitative improvement (greater depth). As already noted, the merit and excellence levels of NCEA achievement standards could have been an influence here. (Although aspirations to develop thinking skills programmes appeared unchanged, note that 59 percent of teachers already said they had such programmes in 2006, and we do not know how great an increase this was from 2003.) The process followed for the revision of the New Zealand curriculum also emphasised content reduction and streamlining in the various learning areas, so this may also have contributed.

Table 11 **Secondary teachers' aspirations for curriculum change: 2006 compared with 2003**

Curriculum changes	2003 (*n* = 744) %	2006 (*n* = 818) %
More depth on fewer topics	21	47
Altered skills focus/teaching	16	32
Change the mix of assessment standards/unit standards	15	30
Greater proportion of practical activities	20	29
Adopt thinking skills approaches [2003 = more time for critical thinking]	30	27
More contemporary examples/issues added	14	27

NB: Percentages add to more than 100 because multiple responses were possible.

The increase in numbers of teachers saying they wanted to add more contemporary issues and examples is encouraging in the light of the call for greater curriculum relevance. Recent research has shown a strong link between this aspect of learning and the active engagement of New Zealand secondary school students in their learning (Wylie, Hipkins, & Hodgen, in press). The greater focus on creating different mixes of assessment standards also suggests that teachers are taking up the flexibility offered by the NCEA to design learning programmes of relevance to their students' perceived learning needs (especially when we add to this 30 percent the 43 percent of teachers who said they had already made such changes—see Figure 4 above).

4.3 Perceptions of the major issues facing secondary schools

As noted in Sections 3.4, all respondents were asked to identify what they saw as the major issues facing their schools. Responses from the secondary surveys are summarised in Table 12. The items listed are only a subset of those included in the questionnaire (a long list of about 20 items).The ranking of stakeholder groups is similar, even though the percentages are different.

Table 12 **Topics seen as major issues in secondary schools**

Topics	Principals (*n* = 194) %	Teachers (*n* = 818) %	Trustees (*n* = 278) %	Parents (*n* = 708) %
Student achievement	60	44	45	37
Assessment workload	55	44	28	15
NCEA workload	47	49	33	21
Assessment driving the curriculum	41	43	18	8
ICT	40	26	15	4
New curriculum framework	28	17	12	7

What secondary principals saw as the major issues facing their schools differed from the views of their primary counterparts. Student achievement and assessment workload were their second and third major issues (after funding but ahead of property development). This no doubt reflects the fact that their students are involved in national assessments. Secondary principals were less concerned than primary principals about the new curriculum framework; this may be because they were surveyed earlier, or simply because (compared with other items in the list) they did not see the new curriculum as a *major* issue. In mid-2006, some may not have begun to consider curriculum implementation.

Teachers' top two (almost equal) concerns were funding (53 percent) and student behaviour (52 percent). After those, their main concerns were the four top items in Table 12. They were less worried than principals about student achievement and assessment workload, but slightly more about NCEA workload and assessment driving the curriculum. They were more concerned than primary teachers about student achievement and assessment driving the curriculum, but even less concerned about the new curriculum. Again, this could be an issue of timing, as the secondary survey was conducted a year before the primary survey, and some teachers may not at that stage have considered how the new curriculum might impact on their work.

There was an age-related difference in teachers' views, with older teachers being more concerned about matters relating to the new curriculum framework (21 percent of over-50s, 17 percent of those aged 40–49, 11 percent of those under 40); the NCEA workload (55, 48, and 43 percent respectively); the assessment workload (52, 45, and 31 percent); and assessment driving the

curriculum (47, 45, and 35 percent). There were, however, no significant differences relating to student achievement or ICT.

For trustees, student achievement was the second most important concern, after funding (74 percent). Third was property development (42 percent), followed by NCEA workload and then assessment workload. Like primary school trustees, those from secondary schools were less concerned about the other items in Table 12.

Parents' main concern, after funding, was student achievement. This was a bigger issue for all categories of secondary respondent, compared with their primary counterparts, due no doubt to the perceived importance of the NCEA. A number of other issues rated ahead of concerns about workload, while ICT, the new curriculum, and assessment driving the curriculum, came low among secondary parents' as well as primary parents' priorities.

4.4 Summary

The secondary survey was undertaken in 2006, before *The New Zealand Curriculum:Draft for consultation* (Ministry of Education, 2006a) was published but after its contents had been widely signalled. A lot of the changes reported by principals and teachers as having been introduced or planned indicate that moves in the required direction were already taking place,

According to principals, literacy and numeracy programmes had been implemented in a large majority of schools and were being considered in almost all others. The better integration of ICT into learning (a requirement of the revised curriculum) was said to have been achieved by two-thirds of secondary schools and was being considered by most of the rest. All of these reflect a marked change since 2003, particularly in numeracy programmes, which only a quarter of secondary schools claimed to have in the earlier survey.

Less progress had been made with the key competencies, but more than a quarter had introduced them and half were considering doing so; similar progress had been made or planned with thinking skills (one of the key competencies) and inquiry learning, although secondary schools were not as advanced as primary schools (perhaps because they were surveyed at an earlier date).

Teachers' perceptions of curriculum changes were often different from principals', no doubt because they were reporting on the basis of their individual classroom work, rather than from a whole-school perspective. Teacher responses differed by age, gender, and main subject taught; women, on the whole, were more willing to try out new approaches, and older teachers were more likely to have introduced a number of the strategies listed.

Integrating two or more curriculum subjects was less common in secondary schools than in primary schools. Although the difference was not so great, secondary schools were also less likely to have introduced or considered a focus on assessment for learning and a range of other approaches: problem solving, inquiry learning, more depth on fewer topics, the key competencies,

individual learning programmes, and using parents as a source of information. These differences may be partly due to the difference in timing of the two surveys, but they doubtless also reflect traditional differences between the sectors in styles of teaching and learning, which may make it easier for primary schools to adopt the strategies advocated in the revised curriculum.

However, comparison of secondary teachers' aspirations for curriculum change in 2003 and 2006 indicates a move away from a focus on quantity in terms of curriculum coverage, and towards quality (greater depth, more contemporary examples).

Student achievement was an important issue for principals, teachers, trustees, and parents. Assessment workload, NCEA workload, and assessment driving the curriculum were also of high importance to principals and teachers, but less so to trustees and parents.

5. Other factors that impact on curriculum

Principals (primary and secondary) were asked about a range of other initiatives that impact on curriculum more indirectly. The first set explored the wider school climate, and the second set management initiatives that potentially impact on curriculum delivery. This chapter reports their responses, and also explores staffing as an aspect of resourcing the curriculum.

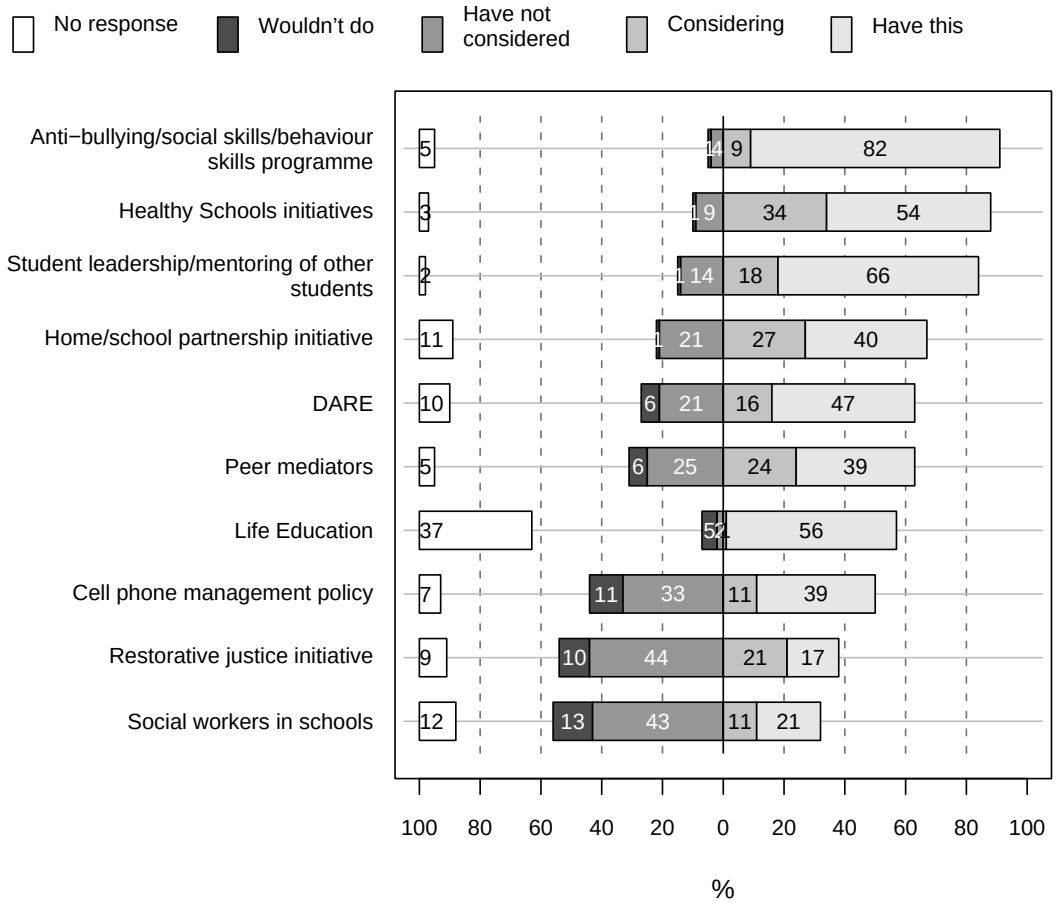
5.1 Initiatives related to the wider school climate

Principals were asked whether they already had, or were considering, a number of initiatives related to the wider school climate. Although not related directly to traditional academic subjects, these initiatives are relevant here because they deal with areas (e.g., behaviour) which are prerequisites for effective learning; some also relate to the key competencies which are an important part of the revised curriculum.

Figure 5 reports the primary principals' 2007 responses and Figure 6 the secondary school principals' 2006 responses to questions about the wider school climate. More than 90 percent of schools—secondary and primary—had an anti-bullying initiative in place, or were considering one. The same pattern held for the related item "Healthy Schools initiatives".

Items included in the primary but not the secondary survey were: peer mediators; DARE (a drug education resource developed by the police education team); and Life Education (another external provider for the health curriculum area). Note that the latter was the item with by far the highest nonresponse rate among the primary principals.

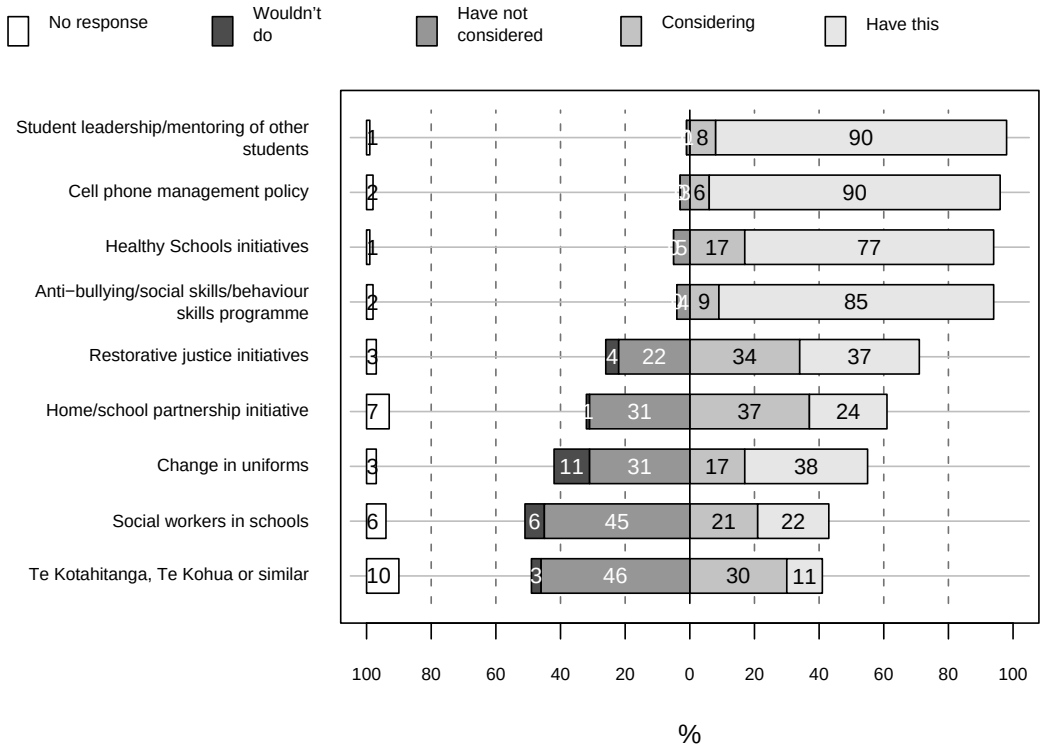
Figure 5 **Primary principals' priorities for wider school initiatives (2007)**



Student leadership/mentoring of other students was the top-ranked item in secondary schools (98 percent), compared with 84 percent in primary schools. A more telling comparison (though harder to make on transparent terms) might be the percentage of students who experience such opportunities, given that the proportion involved is likely to change with the size of the school. Responses show that such initiatives are currently more common in large (78 percent) than small (65 percent) or medium (57 percent) primary schools, although a greater proportion of the latter were considering their introduction. It may be that there is a greater need for such initiatives in larger schools where students are less likely to mix across age levels.

Items included in the secondary but not in the primary survey included changing school uniforms, and initiatives designed to foster better engagement for Māori students in secondary school (Te Kōtahitanga, Te Kohua, or similar).

Figure 6 **Secondary principals' priorities for wider school initiatives (2006)**



In addition to anti-bullying programmes, several other initiatives are likely to be tightly aligned with discipline issues. Of these, restorative justice approaches were more common in secondary schools (71 percent of principals said they had or were considering these, compared with 38 percent of primary principals). It may be that primary school leaders feel their students are not yet sufficiently mature for such approaches to work in their schools. It is interesting to note, however, that principals from urban primary schools were much more likely to have, or be considering, restorative justice approaches (47 percent) than those in rural schools (13 percent). There was also an association with primary school size (*n*ot surprising, since rural schools are likely to be smaller schools): the larger the school roll, the higher the percentage of principals having or considering a restorative justice initiative. This could suggest that discipline is a greater issue in larger urban primary schools.

Older students are also more likely to own cellphones, so it is not surprising that almost all the secondary schools, but only half the primary schools already had, or were considering, a policy in this area. (The proportion was higher in intermediate schools than in full primary or contributing schools, reinforcing the age-related trend.) However, urban primary schools were more likely to have a cellphone management policy in place than rural schools (45 percent, compared with 31 percent).

Fewer schools in either sector already had, or were considering, an initiative to incorporate a social worker into the school (43 percent secondary; 32 percent primary). There was a very big difference between schools according to socioeconomic context. A large majority of the principals

in decile 1–2 primary schools (81 percent) already had, or were considering, the introduction of social workers in their school, compared with only 17 percent of principals in decile 9–10 schools and 25 percent in decile 3–8 schools. The difference was similar in secondary schools, although the proportion of principals in low-decile secondary schools (65 percent) who had or were considering an initiative to incorporate a social worker into the school was not as high as the proportion in primary low-decile schools.

All of the low-decile primary schools were involved in (81 percent), or considering (19 percent), Healthy Schools initiatives. Just under half of the mid- and high-decile schools were already involved, although more than one-third were considering their introduction.

At least half the primary principals said they had not considered, would not do, or gave no response to these three items (social workers, 68 percent; restorative justice, 63 percent; cellphone policy, 51 percent). Secondary principals gave a similar low ranking to social workers in schools (57 percent would not do, had not considered, or did not respond).

Around two-thirds of the schools already had, or were considering, a home–school partnership initiative (67 percent primary; 61 percent secondary). These were more likely to be in place or under consideration in primary schools that were small, rural, integrated, or low-decile. Forty-two percent of primary principals in decile 9–10 schools, compared with 19 percent in decile 1–2 schools, said they had not considered the possibility, would not do it, or failed to respond to the item. Responses from secondary school principals revealed a similar although less pronounced pattern with reference to school decile. The proportion of schools already having a home–school partnership was similar (around a quarter) in low- and high-decile schools, but the proportion saying they were considering/would not consider was very different.

Te Kōtahitanga and Te Kohua are also initiatives that seek to support teachers to take account of students' cultural backgrounds and engage them in learning. In 2006, these initiatives were appealing to under half the secondary schools (59 percent of secondary principals said they had not considered, would not do, or gave no response to implementation of Te Kōtahitanga, Te Kohua, or similar). In this case, there was an even more marked difference between high- and low-decile schools. Two-thirds of decile 1–2 schools were involved or considering involvement; in decile 9–10 schools the corresponding proportion was 15 percent. There was also a large difference between state schools (half involved or considering) and integrated schools (*n*one involved, 5 percent considering).

Initiatives such as Te Kōtahitanga and Te Kohua are likely to be aimed particularly at Māori students, and cross-tabulation showed that two-thirds of schools with 30 percent or more Māori students were likely to be involved or considering, compared with only 11 percent of schools with up to 8 percent of Māori students. Regression analysis showed that, after controlling for proportion of Māori students, decile was no longer significantly associated with involvement in these initiatives.

The factors most strongly linked with involvement in wider-school initiatives generally were:

- for primary schools, type (full primary schools were involved in more initiatives than intermediate schools, which in turn were involved in more than contributing schools) and decile (low-decile schools most likely to be involved)
- for secondary schools, decile only (low-decile schools most likely to be involved).

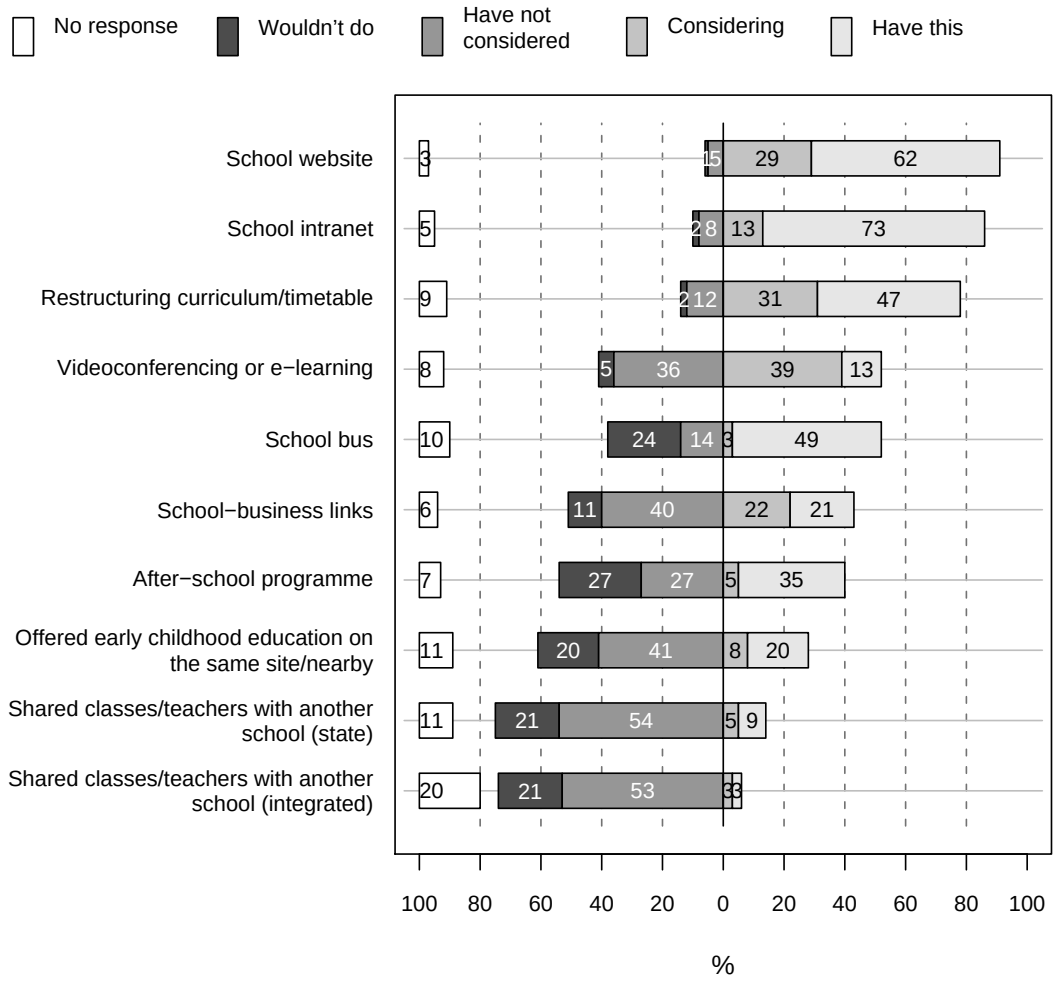
5.2 Management initiatives that potentially impact on curriculum

Not all the items included in the following set might be expected to impact as directly on curriculum, but the full set of responses has been included to get a sense of relative priorities. Items in this set were identical for secondary and primary principals. Figure 7 shows primary principals' priorities for management initiatives, while Figure 8 shows those of secondary principals.

For both groups, establishment of a school website was the top-ranked management priority. Secondary schools seemed to be further down the track, with 97 percent saying they already had such a site, compared with 62 percent of primary schools (high- and mid-decile primary schools were twice as likely to have websites as low-decile schools). A similar pattern was recently found for the implementation of electronic student management systems (SMS) (Hipkins, Joyce, et al., 2007). The establishment of a school intranet also rated high priority and there was less of a gap between progress in the two sectors (78 percent of secondary schools and 73 percent of primary schools already had an intranet in place). All these systems, depending on how well they function and are used, have the potential to support curriculum innovation via the sharing of information and ideas about teaching programmes, learning materials, and achievement patterns and challenges.

By gathering all the learning area statements into one document, with a common set of principles, values, and key competencies, the revised curriculum suggests a more holistic curriculum framework. In the light of this, it is interesting that so many schools had already, or were considering, curriculum innovations that involved some restructuring of the school timetable (81 percent secondary; 78 percent primary).

Figure 7 **Primary principals' management innovation priorities**



Some items in this set concern ways in which the curriculum is supported by teachers and other adults who can lead learning—whether within the school or outside it. Here, videoconferencing or e-learning was the top-ranking initiative in both sectors (63 percent of secondary schools already had, or were considering, this, compared with 52 percent of primary schools).

About half of primary and secondary schools had, or were considering, the introduction of a school bus. Secondary school students are more independent, but may have further to travel (the secondary principals' question specified a school bus for nonlocal students). Secondary schools were more likely to have an after-school programme (56 percent, compared with 40 percent of primary schools); they are likely to be larger, have more facilities and personnel available, and more students who are able to travel home independently after school hours.

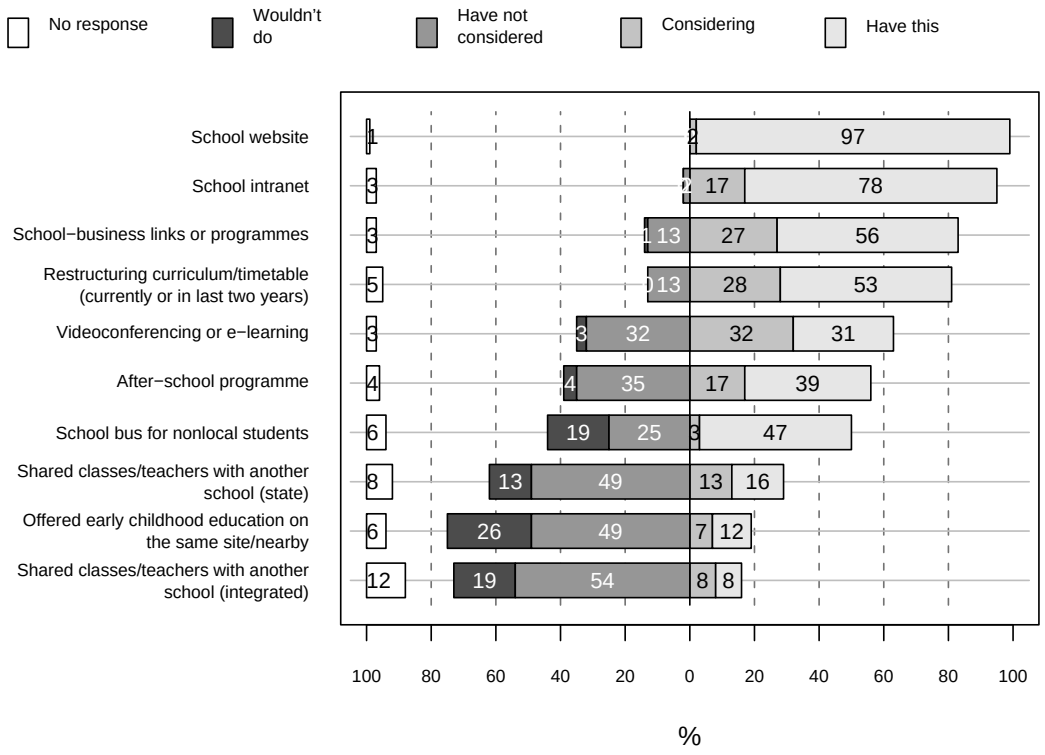
School–business links can be valuable at all ages, but may be considered more relevant to older students who are nearing the end of their school career and for whom it is appropriate to learn more about the world of work. Accordingly, the proportion of secondary schools with, or

considering, school–business links or programmes (83 percent) was almost double that of primary schools (43 percent).

Primary schools were more likely than secondary schools to offer, or consider offering, early childhood education (ECE) on the same site; this would be expected, as ECE leads directly on to primary education. However, ECE on the same site can help with attracting and retaining teaching staff; 12 percent of secondary schools offered ECE, and a further 7 percent were considering it.

Secondary schools were more likely to share classes or teachers with other schools, presumably in order to benefit from specialist expertise which would be less important in primary schools.

Figure 8 **Secondary principals' management innovation priorities**



There were clear differences (to be expected) according to location. Almost half the urban primary schools (47 percent) but only 4 percent of rural schools, had an after-school programme in place. Conversely, a large majority of rural schools (81 percent), but only 38 percent of urban schools, had a school bus. These two items are related. In rural schools, students are more likely to need a school bus to travel to and from school; but the fact that most students are travelling by bus would make an after-school programme difficult to sustain.

School size is another important factor (although size and location are obviously related). The larger the primary school roll, the more likely the school is to have its own website, as well as an after-school programme; the less likely it is to have a school bus. Primary schools with more than 300 pupils were more likely to have, or be considering, school–business links. Small schools (roll up to 100) were more likely to have, or be considering, ECE on the same site or nearby (43

percent, compared with only a quarter of larger schools). Socioeconomic context was highly influential in this regard: 59 percent of primary principals from decile 1–2 schools offered, or were considering offering, ECE, compared with only 13 percent from decile 9–10 and 26 percent from decile 3–8. In the secondary sector, the proportions were 38 percent from low-decile schools, and only 3 percent from high-decile schools. The need for on-site ECE is greater—or perceived to be greater—in less-advantaged areas.

Rural secondary schools were less enthusiastic about sharing classes than urban schools, which probably reflects the fact that doing so would be more difficult for them. (For primary schools, the difference was less marked, but they are likely to cover smaller areas, and therefore be closer together.) Sharing classes or teachers with another state school was not well supported (only 29 percent of secondary and 14 percent of primary principals said they already did or would consider doing this). Very few state secondary schools shared classes with state-integrated schools, or were considering doing so (8 percent in total); nearly half of principals from integrated schools responded positively to this question, indicating that they shared classes (or were considering sharing classes) with another integrated school.

Regression analysis showed that, after controlling for other background variables, U-grade (related to the size of the school roll) was the only significant factor associated with take-up of management/organisational initiatives in primary schools: the higher the U-grade, the higher the number of initiatives implemented in the school. In secondary schools, the only significant factor was location: rural schools were involved in fewer initiatives than urban schools.

5.3 Staffing matters

The last cluster of items discussed draws attention to the staffing of schools. In what ways do changing patterns of curriculum delivery impact on the ways schools are staffed? We complete this section by considering issues related to this question.

Are secondary teachers working to their discipline strengths?

In secondary schools, the move to the NCEA as the vehicle for assessment for qualifications has potentially enabled more flexibility in the ways subjects can be organised (Hipkins, 2007b). However, there are pressures associated with the move to greater subject integration or other forms of innovation. For example, if new "subjects" cross discipline boundaries, teachers might find themselves working outside their own areas of curriculum expertise. We asked about this in the 2006 national survey, but did not find this to be as much of a problem as we had been led anecdotally to expect. Most teachers (76 percent) said they were teaching in one curriculum area only, and this tended to be their area of expertise. As Table 13 shows, teaching outside one's specialist area is more likely to happen in Years 9 and 10 than in Years 11–13.

Table 13 **Secondary teachers' curriculum areas and whether these are areas of their personal curriculum expertise (*n* = 818)**

Curriculum area	Teaching in this area (% of sample)	In area of expertise Years 11–13 (% of this subject)	In area of expertise Years 9–10 (% of this subject)
English	19	90	87
Social sciences	16	95	81
Sciences	14	95	86
Mathematics	13	92	77
Technology	12	90	80
Arts	8	93	87
PE/health	8	89	84
Careers	5	79	95
Languages	3	96	79
Special education	2	80	62
Transition	3	50	NA
Other	12	73	74

Subjects in the "Other" category included business studies, computer studies, ESOL, vocational, religious studies (all 2 percent) and media studies (1 percent).
NA = item not included for this group.

Reasons teachers gave for teaching outside their own area of expertise are shown in Table 14. Although only a small subset (20 percent) of the overall sample responded to this question, there is very little indication here that NCEA developments, or any other curriculum integration initiative, are leading to a demand for teachers to work outside the areas in which they consider their expertise resides.

Table 14 **Reasons for teaching outside own areas of curriculum expertise**

Reason	(*n* = 818) %
There was no-one else who could teach it	6
It fitted a gap in my timetable	6
I was appointed to this position	6
I wanted to upskill in another curriculum area	5
I wanted to upskill in my main curriculum area	2
I teach across a range of subjects in an integrated curriculum model	1

Supplementing staffing in schools

Schools can employ as many teachers as they wish, but the costs of a certain number (based on school roll) are met directly by the MOE. This is known as entitlement staffing; the costs of any additional teachers employed must be met from school's own funds, which include government operational funding. A study of 18 effective New Zealand schools (Wylie & King, 2006) found that all of those schools employed teachers above their staffing entitlement. The proportion of teachers employed using locally managed funds has risen steadily from 2000, when 3.2 percent of primary and 3.6 percent of secondary full-time equivalent positions were funded this way. In 2005, the proportions were 4.8 and 5.1 respectively.

In the 2007 national survey, primary school principals said they funded on average one equivalent full-time teacher over their entitlement and secondary school principals funded an average of 2.5 teachers over entitlement. Some had no additional staff, primary schools had up to five, and secondary schools might have eight or more. As might be expected, there was an association between school size and the number of staff over entitlement. The next table shows the type of work these additional teachers were likely to be undertaking.

Table 15 **Work carried out by supplementary staff**

Work carried out	Primary (*n* = 196) %	Secondary (*n* = 194) %
Literacy/numeracy support	31	33
Teach in a curriculum area	31	52
Special needs/learning assistance	29	28
Extension students/GATE	13	10
ESOL	13	35
ICT support	12	13
Music or other arts tuition	11	10
Principal relief	7	NA
Work with international fee-paying students	6	40
Pastoral care	6	13
Te reo Māori	4	5
Data management	3	7
Life/work skills	2	10

NB: Percentages add to more than 100 because multiple responses were possible.
NA = item not included for this group.

As the table shows, nearly a third of both primary and secondary schools said they were using supplementary staffing to support literacy and numeracy programmes in the school. Both primary and secondary schools appear to be funding above-entitlement teaching staff for special needs, ICT support, music and arts tuition, and te reo Māori.

Given the greater focus on separate learning areas in secondary schools, it could be expected that they would need to make greater use of supplementary staffing to fill gaps in curriculum areas. Secondary principals reported using supplementary staffing right across the curriculum: English (9 percent), science (6 percent), mathematics (5 percent), languages (4 percent), social sciences (3 percent), arts and health/PE (both 2 percent), technology, business subjects, and ICT (all 1 percent). Primary principals reported using supplementary staffing in fewer curriculum areas, but again their most frequent use was in the "core" curriculum subjects: English and mathematics (both 4 percent), ICT (3 percent), languages (2 percent), science, health/PE, and technology (all 1 percent).

Secondary schools tend to enrol greater numbers of international students so again it could be anticipated that they would need more supplementary staff time to support them and for ESOL programmes. International fee-paying students are more likely to be enrolled in high-decile schools; consistent with this, the proportion of principals saying that they used supplementary staff to work with them was much higher in high-decile schools, although the numbers were too small to be statistically significant. Life/work skills take on more pressing salience as students approach the end of their school years and support structures for adolescents are also likely to take account of increasing needs during these years. The additional time needed to supplement data management in secondary schools is likely to be related to NCEA tasks—both in sharing data with the New Zealand Qualifications Authority (NZQA) and managing moderation procedures. Principal relief is more likely to be needed in smaller primary schools where principals are also teaching. Thus, 20 percent of small schools reported using supplementary staff for that purpose, compared with 7 percent of medium schools and no large schools (although it should be noted that the numbers were very small).

5.4 Summary

A large majority of schools (primary and secondary) already had anti-bullying initiatives in place in 2006 and 2007. Most secondary schools also had Healthy Schools initiatives and student leadership/mentoring programmes. Restorative justice approaches and home–school partnerships were less common, but a substantial number of schools were considering their introduction. Social workers were in place or being considered in a large majority of low-decile schools, but relatively few high-decile ones. Two-thirds of schools with 30 percent or more Māori students were likely to be involved, or considering, Te Kōtahitanga, Te Kohua, or similar initiatives.

Nearly all secondary schools, and two-thirds of primary schools, had their own website; most other primary schools were considering setting one up. Three-quarters of schools (primary and secondary) already had an intranet, and others were considering having one. Videoconferencing was less common as yet (though more so in secondary schools) but around one-third of schools were considering its introduction.

About half the schools had recently restructured their curriculum/timetable, and more than a quarter were thinking of doing so. School–business links (existing or planned) were twice as common in secondary schools.

About half the primary and secondary schools had, or were considering the introduction of, a school bus (this was more common in rural schools). Secondary schools were more likely to have an after-school programme, and to share classes or teachers with other schools, though less than a fifth currently share classes or teachers with other schools.

Most secondary teachers said they were teaching in one curriculum area only, which tended to be their area of expertise. Primary school principals said they funded on average one equivalent full-time teacher over their entitlement and secondary school principals funded an average of 2.5 teachers over entitlement. Nearly one-third of primary schools said they were using supplementary staffing to support literacy and numeracy programmes, to teach in a curriculum area, and to provide special needs/learning assistance. In secondary schools, the figures were similar for special needs and literacy/numeracy support, but higher (just over a half) for teaching in a curriculum area (most commonly English, science, or mathematics).

6. Innovation in the use of ICT for learning

Teachers in both primary and secondary schools were asked questions about their use of information and communications technology (ICT) in the classroom. This was not a focus of the principal surveys, where a wide range of topics needed to be included in limited space. In this chapter we report first on teachers' views about the place of ICT in learning. We then look at teachers' reports of how ICT is actually being used in primary and secondary classrooms, how this compares with teachers' views on its importance, and any changes in practice over recent years. Finally, we examine the constraints which secondary teachers said inhibited their use of ICT, and how these constraints had changed since 2003.

6.1 The place and role of ICT in learning programmes

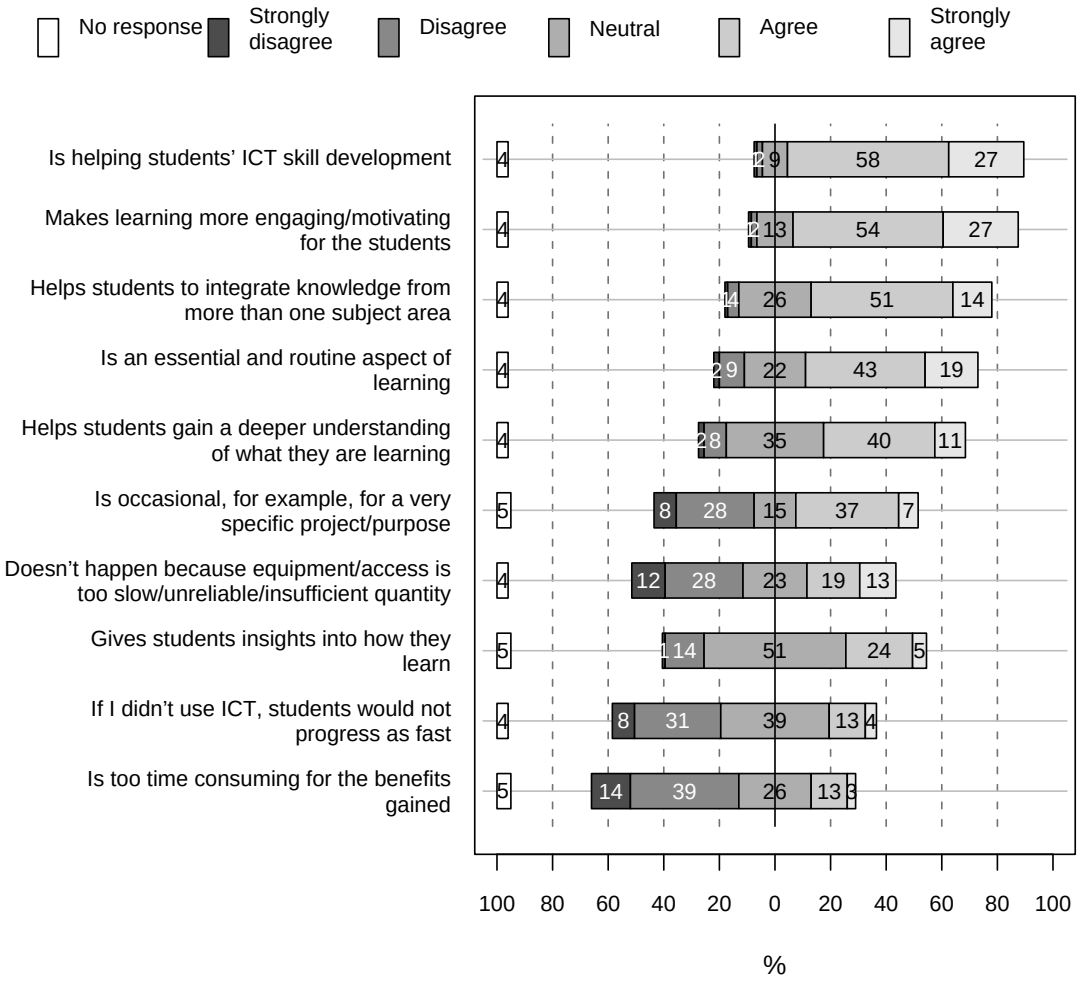
ICT is used in schools for a variety of purposes: for staff administration/management, for students to develop ICT skills, and as a classroom tool for enhancing teaching and learning. The Tech Angels project at Wellington Girls' College involved senior students giving time to coach and support teachers in their use of ICT, as well as mentoring their peers. An evaluation (Bolstad, Gilbert, & Hipkins, 2006) identified two different interpretations of the initiative, one in terms of PD for teachers (to enable them to do better what they were already doing), and one as an attempt to stimulate new ideas about teaching and learning. *The New Zealand Curriculum* states that "Schools should explore not only how ICT can supplement traditional ways of teaching, but also how it can open up new and different ways of learning" (Ministry of Education, 2007, p. 36). However, opportunities for the latter may not always be recognised, even where ICT is being used.

Effective learning through ICT depends on teachers themselves being confident and capable users, able to select appropriate resources and integrate ICT use into their classroom practice. And "while there are many examples of highly effective practices using ICT in schools these practices are not yet fully embedded into everyday teaching practice" (Ministry of Education, 2006c, p. 6). The latest NZCER national survey therefore sought to explore the extent to which, and the ways in which, ICT was being used in primary and secondary education.

Teachers were asked to indicate their views on the use of ICT for learning. Primary and secondary responses are illustrated in Figures 9 and 10 respectively. Almost all primary teachers agreed that their students' use of ICT was helping their ICT skill development, and that it made learning more engaging/motivating for students. A majority (62 percent) agreed or strongly agreed that ICT use was "an essential and routine aspect of learning"; it is somewhat surprising, therefore, that 44

percent (which must include some of the same teachers[8]) said that ICT use in their classroom was "occasional", used only for a specific project or purpose. Moreover, only one teacher in six (17 percent) believed that students would not progress as fast if they did not use ICT; 39 percent of teachers disagreed with this view, and the same proportion were uncommitted. Evidently, there are mixed feelings among primary teachers about the value of ICT. It is also of concern to note that one-third of teachers (32 percent) agreed that inadequate equipment prevented student use of ICT.

Figure 9 **Primary teachers' views on the use of ICT in learning**



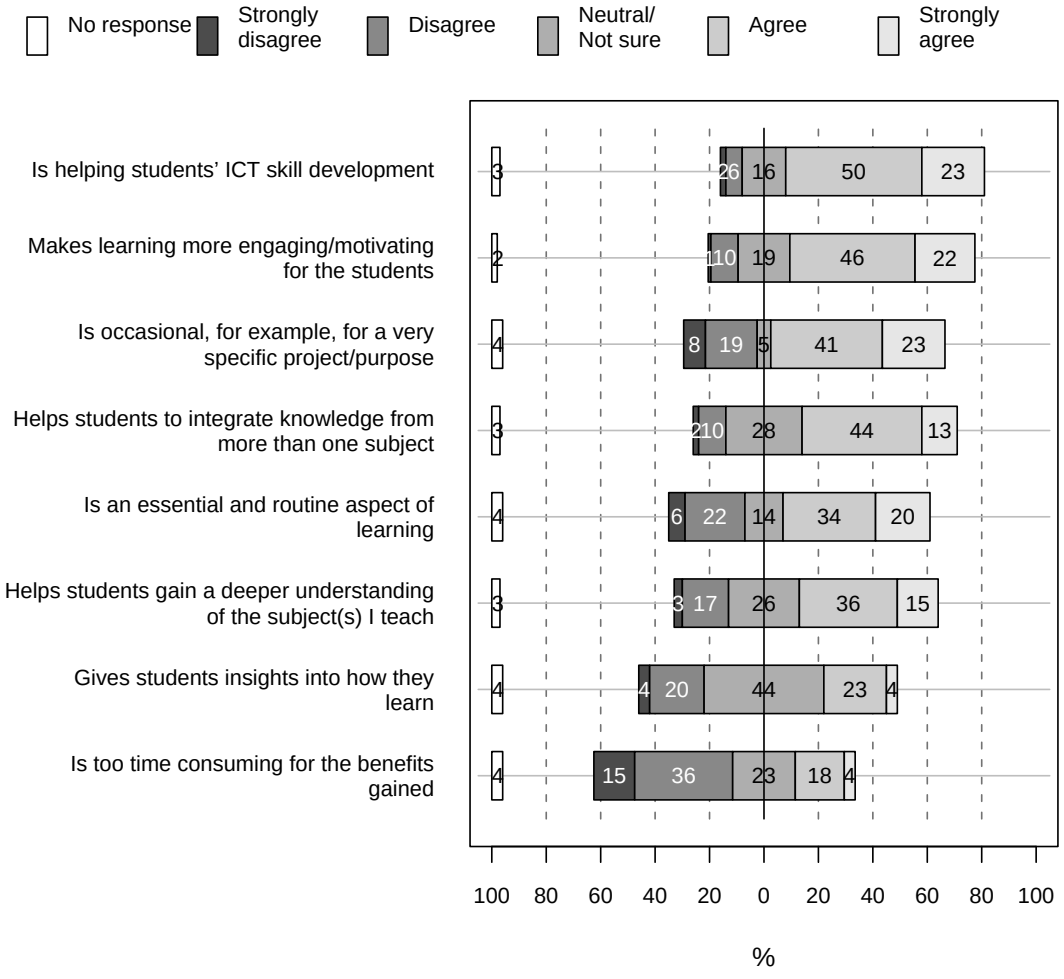
Primary teachers from low-decile schools seemed slightly more positive about the use of ICT in learning. They were more likely than those from high-decile schools to agree (or strongly agree) that it helped students gain a deeper understanding, integrate their knowledge from two or more

[8] Cross-tabulation confirmed that 27 percent of those who regarded ICT as an essential and routine part of learning also agreed or strongly agreed that its use was occasional, for a very specific project or purpose.

subjects, and gain insights into how they learnt. They were, however, less likely to agree that ICT was an essential and routine part of learning.

Compared with primary teachers, secondary teachers were generally less enthusiastic about student use of ICT. The lower percentage (73, compared with 85) who said that it was helping ICT skill development could possibly reflect the belief of some secondary teachers that their students had already acquired the ICT skills that they needed. However, a lower proportion (68 percent, compared with 81 percent of primary teachers) said that it made learning more engaging or motivating, and two-thirds (64 percent, compared with 44 percent of primary teachers) said that their use of ICT was only occasional. This may reflect the fact that use of ICT is more common in some secondary subjects than others; however, an examination of responses by subject taught did not reveal large disparities between subject-based groups of teachers. Another possibility is that differences reflect differential access to computer equipment in different areas of the secondary school.

Figure 10 **Secondary teachers' views of the use of ICT in learning**



As might perhaps be expected, older teachers tended to be less enthusiastic about the benefits of using ICT for learning. Those over 50 were less likely to agree that it makes learning more motivating or engaging for students (73 percent, compared with 82 percent of teachers aged 40–49 and 86 percent of those under 40) and that it helps ICT skill development (77 percent, compared with 89 percent of those aged 40–49 and 90 percent of those under 40). They were less likely to disagree that ICT "is too time consuming for the benefits gained" (47 percent, compared with 54 percent of teachers aged 40–49 and 59 percent of those under 40).

There was more similarity between primary and secondary teachers' responses to items relating to the deeper pedagogical aspects of ICT use. Half of both samples saw the potential for ICT to help students gain a deeper understanding of what they were learning. More than half of secondary teachers, and two-thirds of primary teachers, felt that ICT would help students integrate knowledge from more than one subject. However, just over one-quarter felt that it would give students insights into how they learn. There is evidently a lot of uncertainty on this topic in particular, since 44 percent of secondary teachers and 51 percent of primary teachers remained neutral.

It may be that uncertainty about the potential of ICT to contribute to "learning to learn" aspects of the curriculum lies behind the seemingly mixed messages in the patterns reported above. There is a sense that use of ICT is important, but how is that benefit to be best realised? The ways in which it is actually being used suggest that many teachers do not yet have a clear sense of different types of learning opportunities that ICT can offer. Many of them appear to be using it, if they use it, to bolster more traditional learning intentions. These patterns are reported next.

6.2 How ICT is actually being used

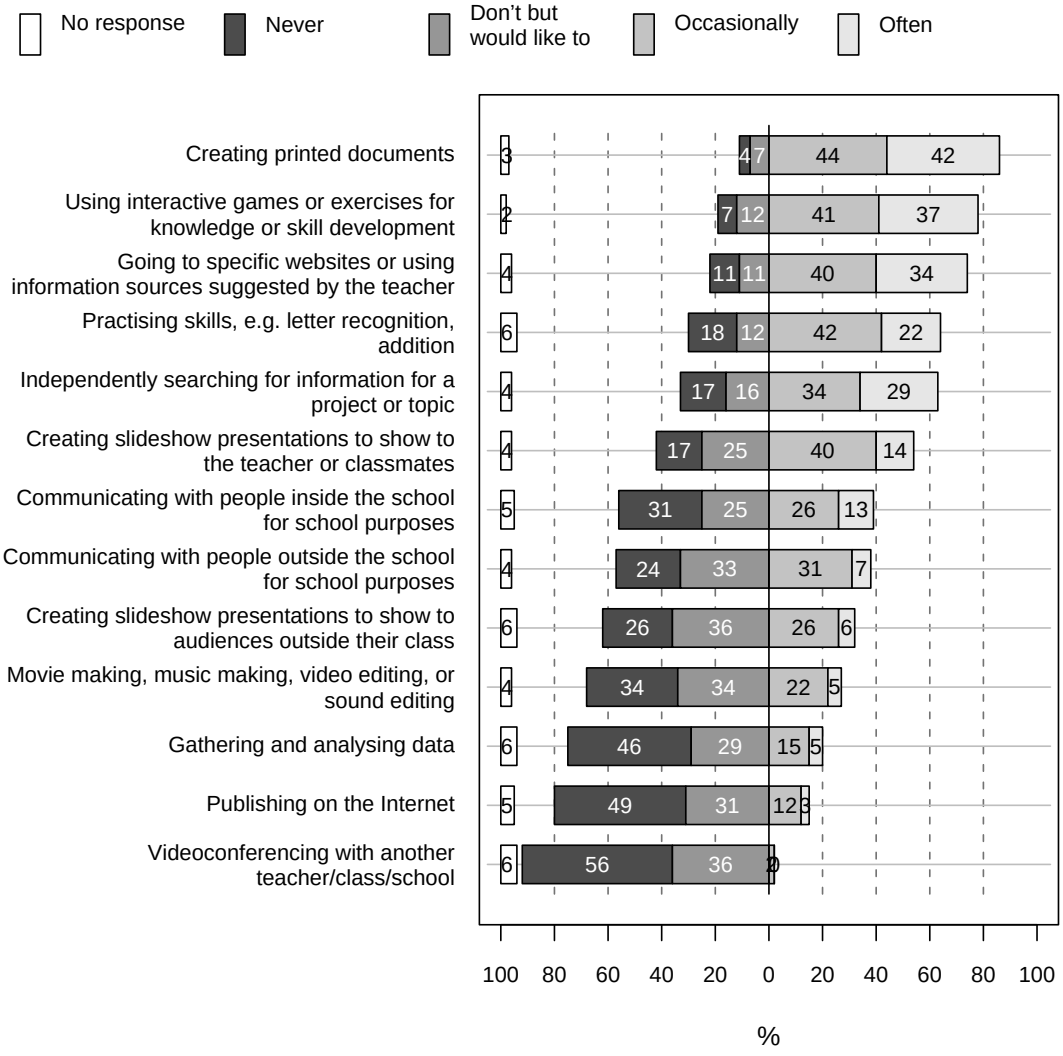
Teachers were asked to indicate how frequently their classes used ICT for learning in a range of different ways. Responses are illustrated in Figure 11 (primary teachers) and Figure 12 (secondary teachers).

The most common uses of ICT were for creating printed documents, using interactive games/exercises, and looking at websites or other information sources suggested by the teacher. For each of these, more than a third of primary teachers said that they did this "often", and a slightly larger proportion "occasionally". However, for most of the items listed, the proportion of teachers who reported using ICT in this way, whether frequently or occasionally, was relatively low.

The most common activities are likely to enhance delivery of a traditional curriculum. For example, students are often encouraged to create good copies of completed work—word processing makes this easier and more professional, but does not entail a different type of learning opportunity. The same can be said of information gathering. Aspects of learning that can only be achieved electronically (for example, using knowledge in new ways to create new understandings,

or using databases to organise and process information and perhaps solve problems) are those that students are currently least likely to experience. Given that these types of opportunities potentially align very well with both the key competencies and the "learning to learn" aspects of *The New Zealand Curriculum* (Ministry of Education, 2007), this is a challenge that could be further investigated.

Figure 11 **Primary classes' use of ICT**



Use of ICT for going to suggested websites, independently searching for information, and movie making was more common in state primary schools than integrated schools.

Intermediate school classes were more likely than primary school classes to go to suggested websites, independently search for information, and use ICT for gathering and analysing data. Conversely, intermediate school students were less likely to use ICT for interactive games and exercises. These age-related trends continue further in secondary schools (see Figure 12 below).

Interestingly, intermediate schools were more likely to use ICT for movie making, etc. than either secondary or primary schools.

There was an association between primary school size and using ICT for:

- creating slideshow presentations to show to teacher or classmates
- movie making, music making, video, or sound editing
- publishing on the Internet.

Teachers from larger schools were more likely to report that their classes took part in these activities, perhaps because they are more likely to have the funding necessary to invest in the equipment required, or to have access to community resources such as editing suites.

Teachers from low-decile schools were more likely to say that they never used ICT to communicate with people outside school, and less likely to say that they would like to; perhaps because ICT ownership was less prevalent in their school communities.

There were also differences by teacher age and gender in the use of ICT. Older teachers were generally less likely to use ICT than their younger colleagues. Female teachers were more likely than male teachers to have their students use ICT, at least occasionally, for practising skills (66 percent, compared with 48 percent), and using interactive games for skill development (79 percent, compared with 74 percent). On the other hand, male teachers were more likely to have students use ICT for: independent research (79 percent, compared with 61 percent of female teachers); making PowerPoint presentations (67 percent, compared with 52 percent); gathering and analysing data (30 percent, compared with 18 percent); making movies, etc. (38 percent, compared with 26 percent); communicating with people inside school (52 percent, compared with 37 percent); and publishing on the World Wide Web (21 percent, compared with 14 percent).

Regression analysis showed that, when all available school- and teacher-level variables were taken into account, the three significant factors associated with overall use of ICT in the primary classroom were:

- teacher age (generally younger teachers more likely to use ICT)
- U-grade (teachers from higher grade (larger) schools more likely to use ICT)
- location (teachers from urban schools more likely to use ICT).

Factor analysis was used to define a measure of ICT use for teaching and learning. It included all of the items listed above except for practising skills and using interactive games, which did not correlate well with the others. On this basis, teachers were divided into quartile groups (of approximately equal size), and their ICT use classified as very low, low, high, or very high. This measure was cross-tabulated against teachers' views of the use of ICT (see Figure 9). Not surprisingly, those who used ICT more often had more positive views about it. They were more likely to agree with all of the statements in Figure 9 except for the three which could be perceived as negative (see Table 16). However, even in the highest category of ICT use, only 30 percent agreed with the statement that students would not progress as fast without ICT. Again, this

suggests that the potential of ICT to offer a unique contribution to learning is not yet widely perceived.

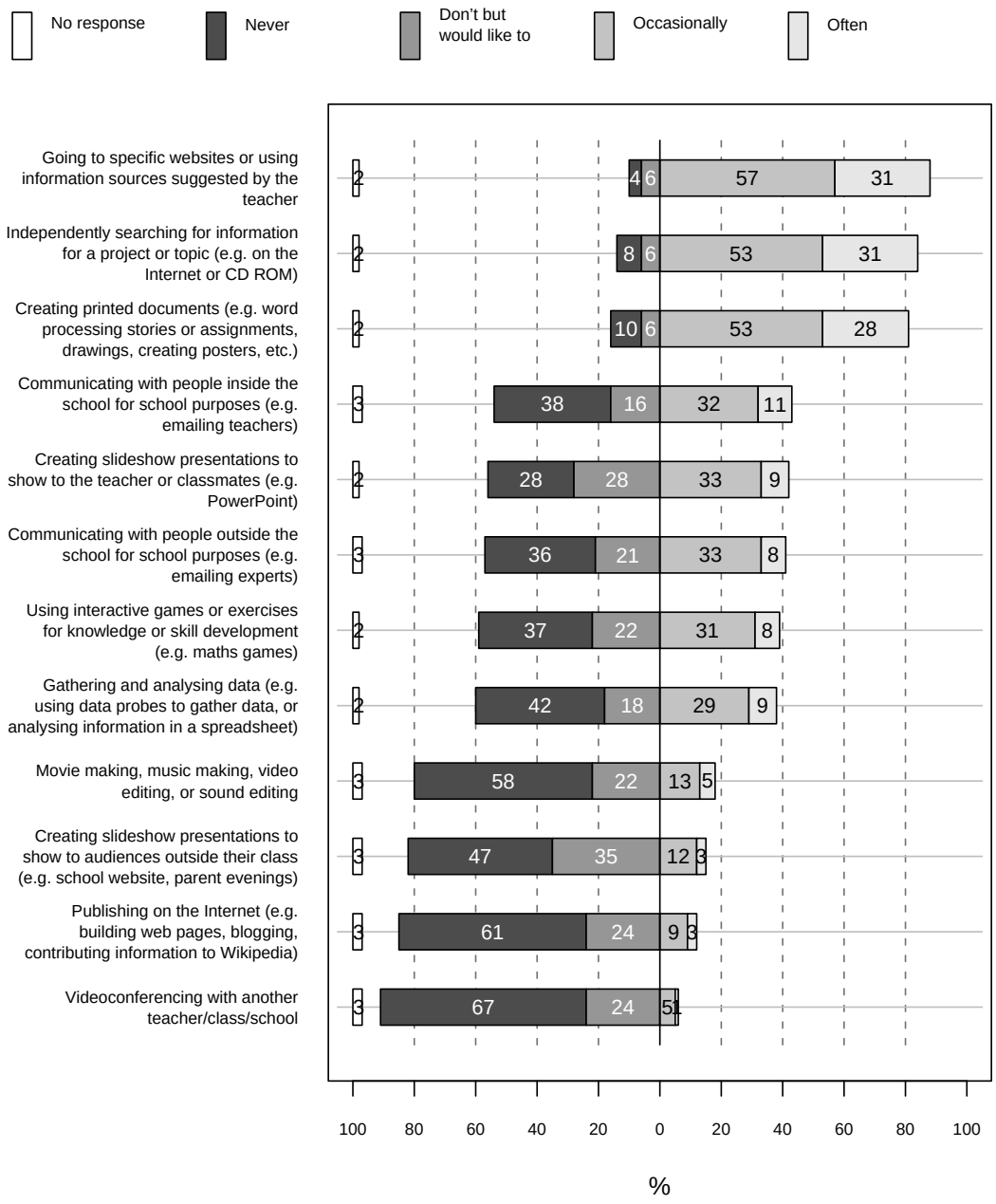
Table 16 **Primary teachers' views on the use of ICT, by frequency of use**

Views	Frequency of ICT use			
	Very low (*n* = 228) %	Low (*n* = 229) %	High (*n* = 218) %	Very high (*n* = 219) %
Is occasional, for example, for a very specific project/purpose	54	56	41	26
Is an essential and routine aspect of learning	47	58	67	80
Makes learning more engaging/motivating for the students	57	81	89	90
Helps students gain a deeper understanding of what they are learning	37	52	57	64
Helps students to integrate knowledge from more than one subject area	50	62	73	79
Is helping their ICT skill development	74	87	93	92
Is too time consuming for the benefits gained	27	20	10	6
Gives students insights into how they learn	17	27	33	42
Doesn't happen because equipment/access is too slow/ unreliable/insufficient quantity	42	42	28	18
If I didn't use ICT, students would not progress as fast	10	7	23	30

For secondary teachers, usage was broadly similar to that reported by primary teachers: frequent or occasional use by a large majority in three key areas, relatively low usage elsewhere. As might be expected as students grow older, using interactive games became less common;[9] there was less going to specific websites recommended by the teacher, and more independent research. Only a very small proportion of primary and secondary schools were engaged in videoconferencing. Neither primary nor secondary teachers appeared to see the potential scope and benefits of writing blogs, for example: only 15 percent of primary teachers and 12 percent of secondary teachers said that their students often or occasionally published on the Internet.

[9] Commonly used interactive programs support basic skill development in mathematics and English, in particular. This type of learning of "basics" may not be seen as still necessary in the secondary school, at least for the majority of students.

Figure 12 **Secondary teachers' use of ICT**



As might be expected, there were significant differences according to teachers' specialist subject area. Mathematics and science teachers were much more likely to use ICT for gathering and analysing data (71 percent did so at least occasionally, but no more than 40 percent in any other subject area). This probably reflects the use of data loggers for empirical investigations, and possibly also the use of algebraic calculators. Mathematics and science teachers were also the group most likely to publish on the Internet, possibly on sites such as Globe,[10] that gather reports

[10] Hosted in New Zealand by the Royal Society's website.

of student investigations (17 percent, compared with no more than 11 percent of other subject specialists). However, they were less likely than teachers of English/languages and arts/social sciences to use ICT for creating printed documents, creating slideshow presentations for use within the class, movie making, etc., and communicating with people outside school.

The only significant difference between male and female teachers' use of ICT related to gathering and analysing data. Male teachers were more likely to use ICT for this purpose, or to say that they would like to do so. Only 34 percent of male teachers, compared with 46 percent of females, said that they never did so. This could, however, be linked with subject specialism, because there is a higher proportion of male teachers in mathematics/science than in other subject areas.

A regression analysis was undertaken to determine the key factors associated with secondary teachers' use of ICT. In addition to school-level variables, and teacher age and gender, a variable was included that represented teacher attitude to NCEA (derived from responses to other questions). This proved to be the only significant factor: the more positive teachers' attitudes to NCEA, the greater their use of ICT in the classroom.

Secondary teachers' use of ICT in the classroom was compared with their views on ICT in teaching and learning, in the same way that primary teachers' responses were analysed (see above). The results were very similar, as shown in Table 17.

Table 17 **Secondary teachers' views on the use of ICT, by frequency of use**

Views	Frequency of ICT use			
	Very low (*n* = 224) %	Low (*n* = 206) %	High (*n* = 168) %	Very high (*n* = 208) %
Is occasional, for example, for a very specific project/purpose	85	72	63	37
Is an essential and routine aspect of learning	28	49	62	78
Makes learning more engaging/motivating for the students	51	67	74	82
Helps students gain a deeper understanding of what they are learning	32	52	52	72
Helps students to integrate knowledge from more than one subject area	39	59	60	73
Is helping their ICT skill development	61	73	78	85
Is too time consuming for benefits gained	38	22	19	10
Gives students insights into how they learn	15	24	32	42

With the rapid development of ICT, it might be expected that its use in learning would have increased considerably in recent years. Tables 18 and 19 compare the frequent or occasional use of ICT in the recent surveys with that reported in 2003. As Table 18 shows, there was a

considerable increase in ICT use in primary schools between 2003 and 2007. The proportion of teachers using it to create printed documents had risen from less than half to nearly all. The proportion using ICT to communicate with people outside the school had doubled. The exception was data gathering and analysing, which had actually become less common in 2007 than it was in 2003.

Table 18 **A comparison of primary teachers' use of ICT in 2003 and 2007**

Use of ICT for learning	2003 (*n* = 431) %	2007 (*n* = 912) %
Creating printed documents (e.g., word processing stories, drawings, creating posters, etc.)	44	86
Going to specific websites or using information sources suggested by the teacher	43	74
Independently searching on the Internet*	18	63
Looking at/searching CD-ROMs for reference/information*	38	
Communicating with people outside the school for school purposes (e.g., emailing experts)	19	39
Gathering and analysing data (e.g., using data probes to gather data, or analysing information in a spreadsheet)	30	20

NB: Percentages add to more than 100 because multiple responses were possible.

* The 2006 wording was "Independently searching for information for a project or topic (e.g., on the Internet or CD-ROMs)".

Secondary teachers' use of ICT also increased substantially between 2003 and 2006. (In contrast with primary schools, gathering and analysing data had doubled.)

Table 19 **A comparison of secondary teachers' use of ICT in 2003 and 2006**

Use of ICT for learning	2003 (*n* = 744) %	2006 (*n* = 818) %
Creating printed documents (e.g., word processing stories, drawings, creating posters, etc.)	54	81
Going to specific websites or using information sources suggested by the teacher	54	88
Independently searching on the Internet*	49	85
Looking at/searching CD-ROMs for reference/information*	38	
Gathering and analysing data (e.g., using data probes to gather data, or analysing information in a spreadsheet)	18	38
Communicating with people outside the school for school purposes (e.g., emailing experts)	22	40

NB: Percentages add to more than 100 because multiple responses were possible.

* The 2006 wording was "Independently searching for information for a project or topic (e.g., on the Internet or CD-ROMs)".

6.3 Constraints on the use of ICT

As Figures 11 and 12 show, a substantial proportion of teachers (both primary and secondary) said that they did not use ICT for certain purposes, but would like to. This raises the question of what prevents them. Secondary teachers, but not primary, were asked whether there were any constraints on using ICT to assist learning. They were asked the same question in 2003, and Table 20 compares the responses from both years. Not all of the possible constraints were listed in 2003, but where comparison was possible, the proportion citing each constraint had either stayed the same or increased in 2006. It is of concern to note that developments in the intervening period have not alleviated these problems.

Table 20 **Secondary teachers' perceptions of constraints on using IT: 2003 and 2006**

Constraints	2003 (*n* = 744) %	2006 (*n* = 818) %
Too much demand for computer labs	NA	61
Lack of suitable hardware/computers	40	49
Time needed to research ICT resources	NA	45
Lack of suitable ICT learning resources	31	35
My knowledge of how to use ICT with students	35	35
Overfull curriculum	NA	34
Problems with the computers/they "crash" too often	22	30
Time I need to upskill	NA	30
My ICT skill level or confidence	29	29
Time needed for assessment	NA	26
Lack of suitable network/Internet access	NA	24
Management of classroom	15	23
Other areas take precedence	NA	21
Lack of ICT support	16	18
Not a high priority	11	13
No constraints	5	5

NB: Percentages add to more than 100 because multiple responses were possible.
NA = item not included for this year.

In 2006, the greatest constraints were lack of resources or equipment. Evidently, schools do not have sufficient computer labs for all teachers to be able to use them when required, since 61 percent of respondents noted this as a constraint. Half of the secondary teachers mentioned lack of hardware, a third a lack of software (suitable ICT learning resources), and 18 percent a lack of ICT support. Thirty percent said that available ICT equipment was not robust (computers crash too often).

Teachers from high-decile schools were less likely than others to say that a lack of suitable hardware was a barrier to the use of ICT. On the other hand, teachers from low-decile schools were less likely to see demand for computer labs as a constraint.

Female teachers were apparently somewhat less confident about using ICT, since they were more likely than male teachers to cite constraints relating to them personally: "my ICT skill level" (31 percent, compared with 25 percent); "my knowledge of how to use ICT with students" (38 percent, compared with 30 percent); and "time I need to upskill" (32 percent, compared with 26 percent). Female teachers were also more likely to worry about problems with computers crashing (33 percent, compared with 25 percent), perhaps because they were less confident about fixing problems. On the other hand, male teachers were more likely to see classroom management as an issue (27 percent, compared with 20 percent of female teachers).

Younger teachers (those aged below 40) were evidently more confident about their ICT. They were less likely to see as a constraint their ICT skills (18 percent, compared with 33–34 percent of older groups), their knowledge of how to use ICT with students (29 percent, compared with 34–40 percent), and the time needed to upskill (22 percent, compared with 33 percent). They were more likely to blame a lack of suitable hardware (57 percent, compared with 49 percent of teachers aged 40–49, and 42 percent of those aged over 50), perhaps because they were more aware of the equipment which was available, but not to them.

It was evident that provision of additional higher quality equipment and resources would not solve all of the problems. There is a need for PD: about a third of the teachers referred to their own lack of knowledge in using ICT with students, or more generally to their level of ICT skill/confidence; nearly as many said they needed time to upskill. Time was also an important issue: time for teachers (*n*early half said they needed time to research ICT resources) and also classroom time to spend on ICT. A third cited the "overfull curriculum" as a constraint (although if ICT is seen as a means of learning rather than additional content, this need not be a problem); similarly, a quarter referred to the time needed for assessment, and 21 percent said that other areas took precedence.

6.4 Summary

There were rather mixed messages from teachers about the value of ICT in learning. Almost all primary teachers agreed that their students' use of ICT was helping their ICT skill development, and that it made learning more engaging/motivating for students. A majority felt ICT use was an essential and routine aspect of learning, yet nearly half said that ICT use in their classroom was occasional, used only for a specific project or purpose. A third of primary teachers said that student use of ICT did not happen due to inadequate equipment.

Secondary teachers were generally less enthusiastic than primary teachers about the benefits of ICT. A lower percentage said that it was helping ICT skill development and that it made learning more engaging or motivating; a higher proportion said that their use of ICT was only occasional.

Half of primary and secondary teachers saw the potential for ICT to help students gain a deeper understanding of what they were learning. At least as many felt that ICT would help students integrate knowledge from more than one subject, but fewer thought that it would give students insights into how they learn.

The most common uses of ICT in the primary classroom were for creating printed documents, using interactive games/exercises, and looking at websites or other information sources suggested by the teacher. There was an age-related trend: as students grew older, they were less likely to use ICT for interactive games and exercises, and more likely to use it for independent research.

Older primary school teachers were generally less likely to use ICT than their younger colleagues. Teachers from urban schools, and higher U-grade schools, were more likely to use ICT.

There was a considerable increase in ICT use in primary schools between 2003 and 2007, particularly for creating printed documents and communicating with people outside the school. Secondary teachers' use of ICT also increased substantially between 2003 and 2006, especially for gathering and analysing data.

A substantial proportion of teachers (both primary and secondary) said that they did not use ICT for certain purposes, but would like to. The greatest constraints (in secondary schools) were lack of resources or equipment. Female teachers were more concerned than male teachers about their own skill level and lack of knowledge. Younger teachers were more confident about using ICT.

7. Learning to innovate; sustaining innovation

In a time of rapid change, it is necessary to rethink the whole purpose of learning and schooling. The Secondary Futures project was established to encourage discussion and debate about the role and purpose of secondary education in New Zealand 20 years ahead, and to chart a way forward for improving teaching and learning processes. Early consultations have highlighted the importance of putting students at the centre of the educational process, and the need to develop a customised learning programme for each individual, using a range of appropriate modes, expertise, and resources (Secondary Futures, n.d.). To facilitate this kind of education, teachers will themselves need to be lifelong learners, who "regard their ongoing learning as an essential part of their professional practice" (Secondary Futures, 2007, p. 1). In order to become "catalysts for knowledge discovery", teachers will need to adopt new ways of working, and be at the forefront of innovation. PD will therefore be key.

In this chapter we examine:

- the PD programmes undertaken in primary schools, and principals' perceptions of their impact
- primary and secondary teachers' perceptions of school culture, and the quality of interactions related to professional learning
- the quality of professional relationships within the school: teachers' judgements about their principals and their colleagues; how primary teachers viewed the implementation of new initiatives in their schools; and how secondary teachers regarded their involvement in decision making
- primary and secondary principals' and teachers' assessments of curriculum-related achievements.

7.1 PD programmes

Primary principals were asked a number of questions relating to the PD of their staff. These questions were not asked of secondary principals due to lack of space in the questionnaire (since secondary principals were asked other questions, relating, for example, to NCEA, which were not relevant in a primary school context).

Principals were asked to indicate the kinds of PD they had shared with their teachers in the current year. According to Robinson's (2007) summary of her forthcoming best evidence synthesis on

leadership, promoting and participating in teacher learning and development is the leadership dimension with the greatest impact on student outcomes. In the light of this evidence, principals' responses (Table 21) are encouraging. Two-thirds said that they had had an in-school series of sessions with an external adviser, and the same number reported attending workshops outside school. Forty percent or more had taken part in each of the other types of PD listed. Note that in-house PD could be principal- or teacher-led.

Table 21 **Types of PD principal and teachers shared in primary schools**

Type of PD	Principals (*n* = 196) %
In-school, series—with external adviser	68
Workshop, outside school	67
In-school, series—staff-member-led	61
In-school, one-off—with external adviser	56
In school, one off—staff -member-led	54
Talk, outside school	47
In-school inquiry learning/research	46
In-school, one-off—principal-led	42
In-school, series—principal-led	41
Other	3
PD with external schools/clusters	2

NB: Percentages add to more than 100 because multiple responses were possible.

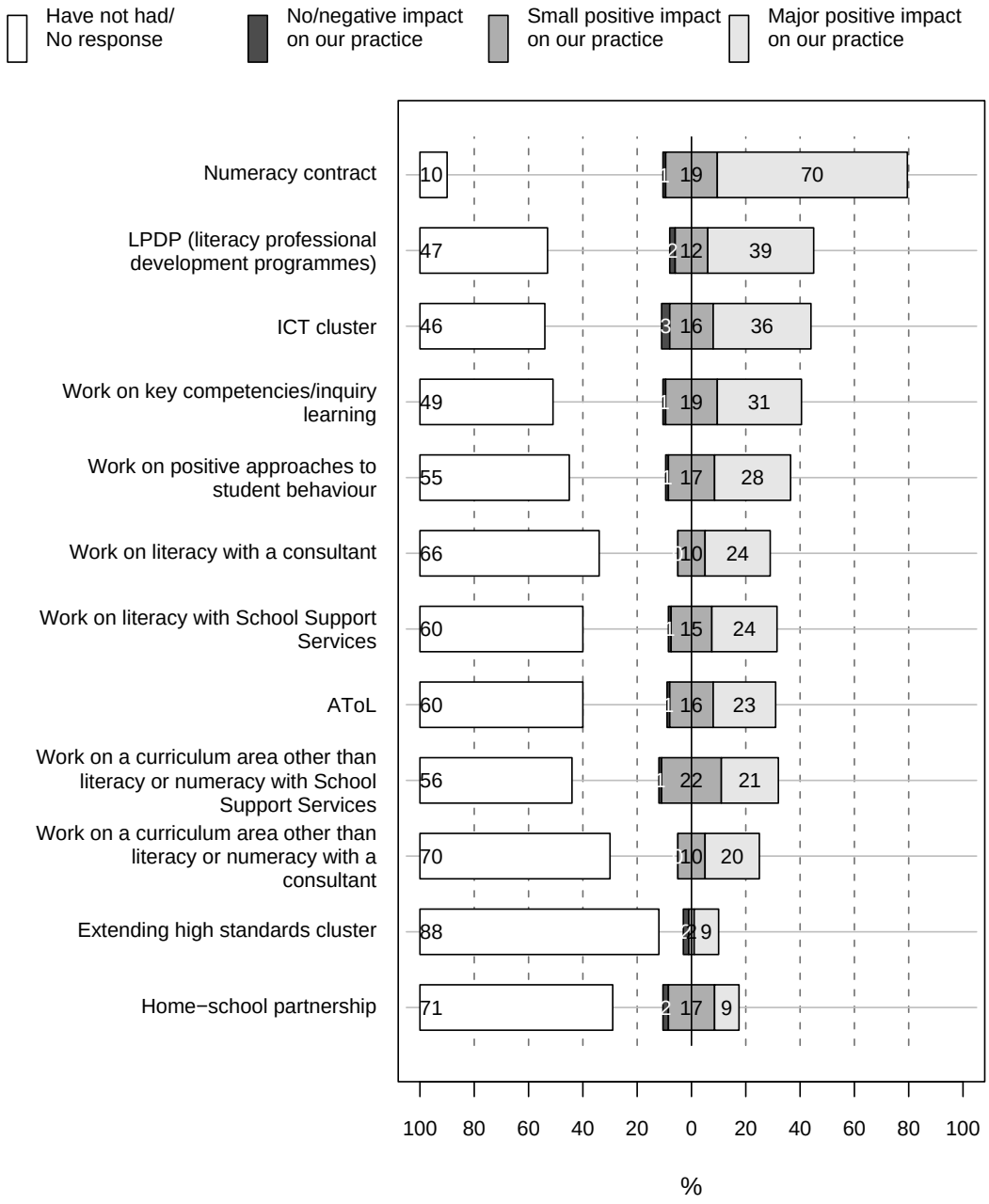
A focus on teachers as learners

Teacher participation in PD programmes does not guarantee effective outcomes for the teacher's students. In a best evidence synthesis, Timperley, Wilson, Barrar, & Fung (2007) explored the characteristics of teachers' learning experiences which were likely to impact successfully on a range of student outcomes. Some of these (such as extended time for learning opportunities, and external expertise) were shown to be necessary but not sufficient conditions. Teacher engagement in learning was more important than volunteering. In case studies which demonstrated sustainability, there was an emphasis on equipping teachers with a strong theoretical knowledge and the skills to inquire into the impact of their teaching on student learning.

In the primary survey, principals were also asked to state what school-wide PD or MOE initiatives the school had been involved in during the past five years, and to make their own assessment of the impact of each. The findings are illustrated in Figure 13. By far the greatest positive responses related to the numeracy contract, which 70 percent of principals said had had a major positive impact on practice in their school. However, it is important to note that only 6 percent said they had not been involved in this. Positive responses were lower for the other topics, but so were the

rates of participation (some initiatives have not been available to every school). For example, only 11 percent of those responding had been involved in "extending a high standards cluster", so it is a positive finding that 9 percent said it had had a major positive impact on the school. With regard to the other initiatives, almost all of those involved perceived at least a small positive impact on their practice.

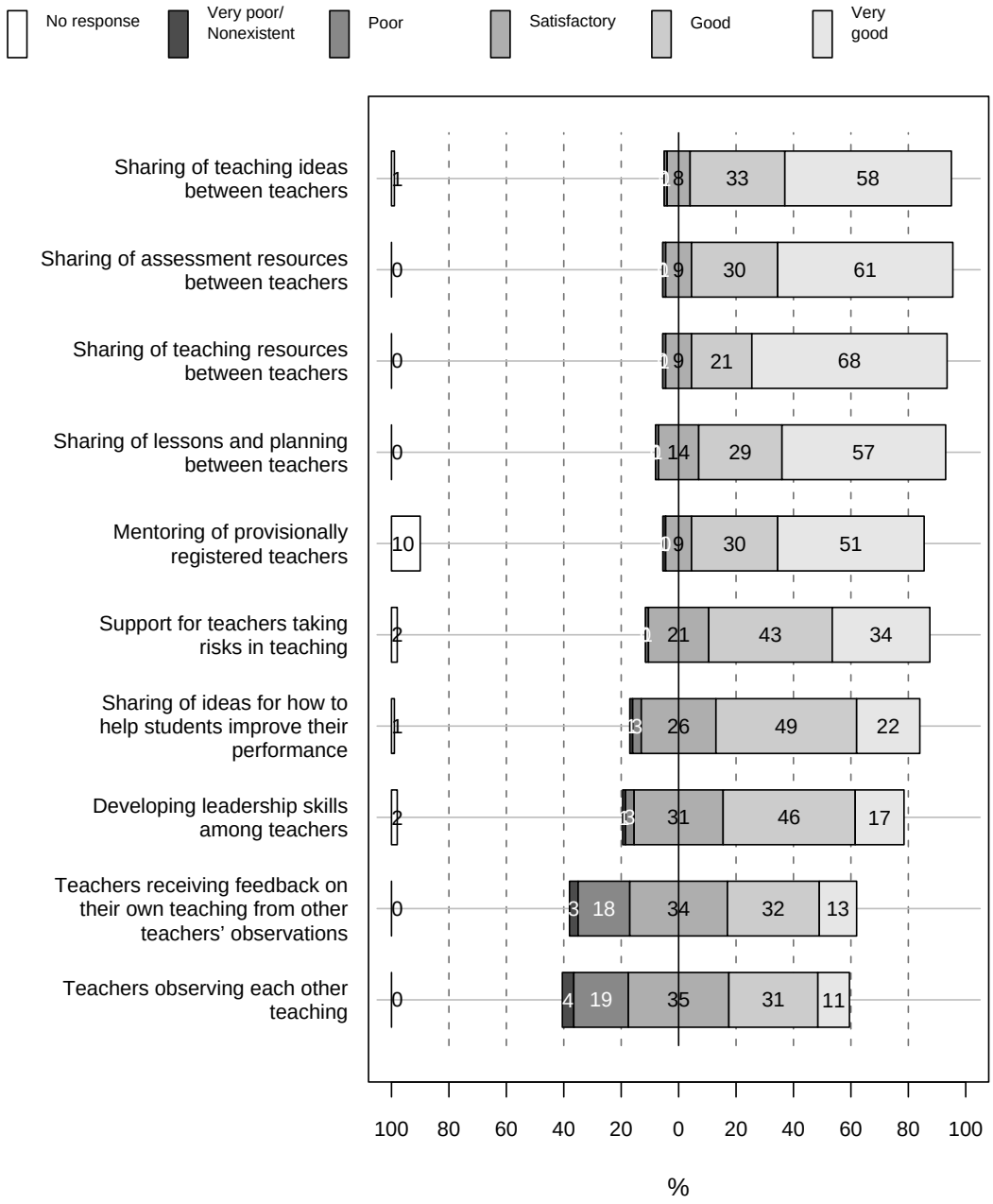
Figure 13 **Primary principals' perceptions of impact of PD**



Although it appears that primary schools had undertaken a considerable amount of PD, and that it was valued highly by principals, only one-third agreed that the school could afford the PD it needed. This could be another possible reason for the low participation rates reflected in Figure 13, though schools are also careful not to spread their attention too thinly, and tend to limit their areas of PD at any one time. There were no significant differences by school characteristics.

Primary principals were also asked to assess the quality of aspects of school culture related to teachers' professional learning. Responses are summarised in Figure 14. A large majority of principals—more than three-quarters in each case—rated as good or very good the sharing of teaching ideas, assessment resources, teaching resources, and lessons and planning between teachers. Ten percent did not respond to "mentoring of provisionally registered teachers", but a large majority of those who did gave it a positive assessment. The least positive assessments related to peer lesson observation, which is a reasonably new development in New Zealand schools. It may be that some principals feel that teachers are not sufficiently critical or insightful in the feedback they give to each other; it could also be that lack of time prevents teachers from providing detailed and valuable feedback to colleagues.

Figure 14 **Primary principals' perceptions of the quality of interactions related to professional learning**



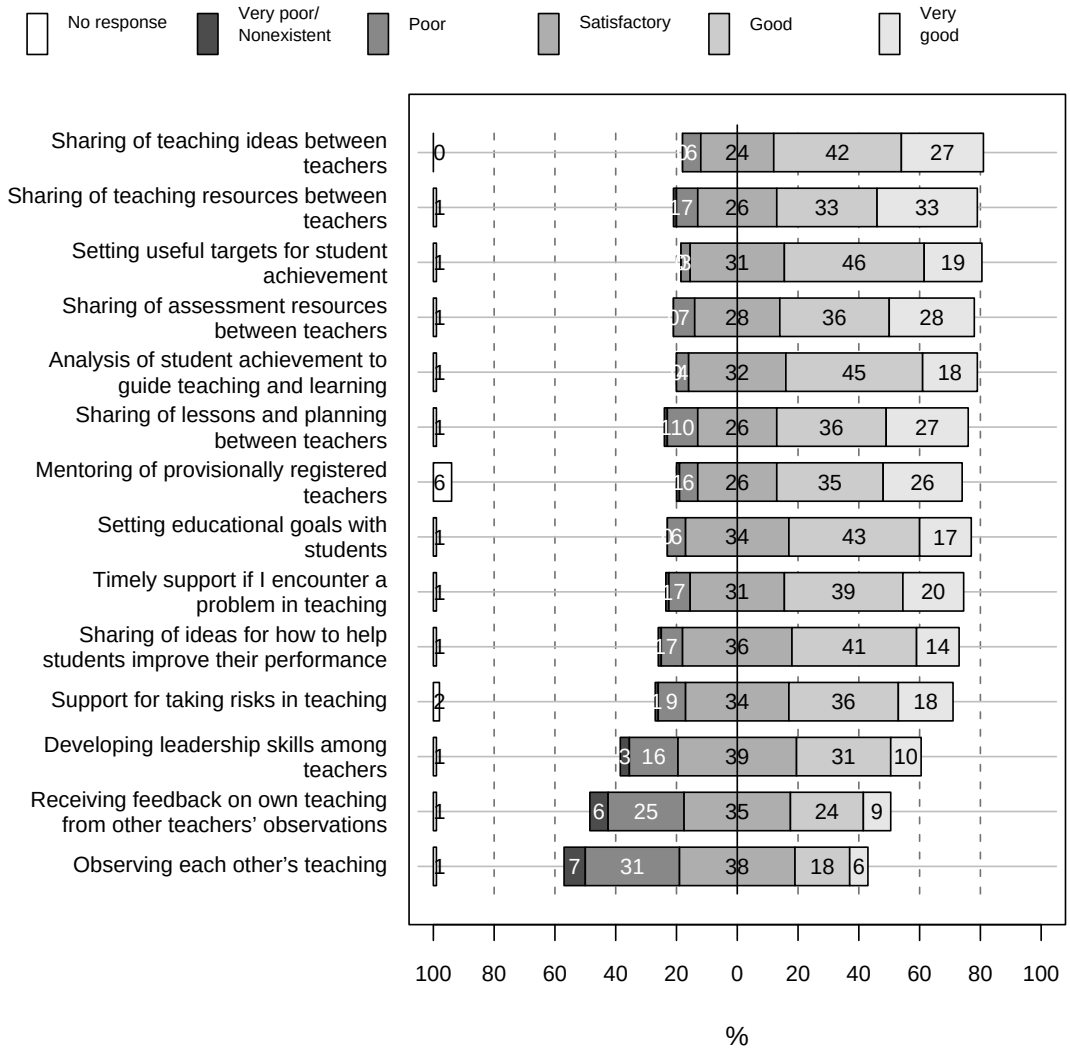
7.2 Teachers learning to learn

Students learn from, and are influenced by, the culture of their school as well as what they are taught in the classroom. It is vital that there is consistency between what teachers say and what they do. If the key competencies are important for students, they are also important for teachers, who need to model them in the way they relate to others, and in their learning interactions.

Primary and secondary teachers were asked to rate the quality of aspects of their school's culture, and their responses to items relating to the curriculum or to PD are illustrated in Figures 15 (primary) and 16 (secondary).

It is interesting to compare the responses of primary teachers with those of their principals. For every common item, teachers tend to be considerably less positive than principals. The differences are particularly striking with reference to the sharing of ideas, resources, and lessons. For each of the first four items, the proportion of principals giving a "very good" rating was double (or almost double) the proportion of teachers. Is this because teachers have higher standards, or because they are more closely aware of what is going on for them personally? Principals may make global judgements based on some positive examples they have witnessed, which possibly affect only a minority of the teaching staff. Whatever the cause, it is a concern if they have an overoptimistic view of what is happening in their schools, because if they believe something is "very good" they may see no reason to aim for improvement.

Figure 15 **Primary teachers' perceptions of quality of interactions related to professional learning**

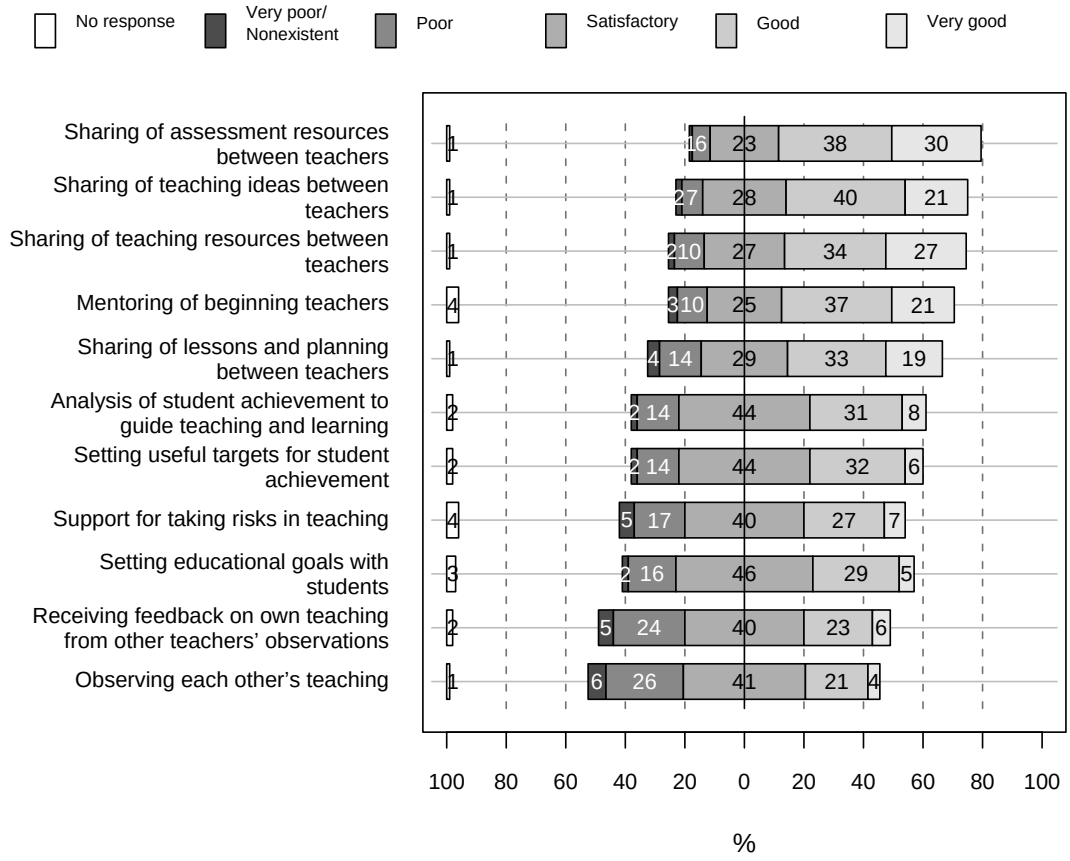


Despite the variation noted above, nearly all teachers and principals rated each item as at least satisfactory. The only exception related to peer observation. Over 20 percent of principals, and a much higher proportion of teachers, rated teacher observation and related feedback as poor, very poor, or non-existent. It is evident that some schools either do not have peer observation, or do not conduct it effectively. Guidelines on how best to obtain the benefits of peer observation may be needed.

Figure 16 shows secondary teachers' responses to those items from Figure 15 which were common to both questionnaires. In general, they tended to be rather less positive than their primary colleagues. The greatest difference was in support for taking risks, rated good or very good by more than half of primary teachers but only a third of secondary teachers (although this represents a big increase since 2003—see below).

An exception to the general rule was the sharing of assessment resources, perhaps because assessment becomes a more important issue at secondary level, but the difference was small (sharing of assessment resources was rated good or very good by 68 percent of secondary teachers, compared with 64 percent of primary teachers). Ratings of peer observation were similar, with just a quarter of primary and secondary teachers finding it good or very good.

Figure 16 **Secondary teachers' perceptions of quality of interactions related to professional learning**



To explore change over time, Table 22 compares responses from primary and secondary teachers in 2003 with those given in the later surveys. In the primary sector, much remained unchanged. The biggest changes were an increase in setting educational goals with students (up from 48 to 60 percent); setting useful targets for student achievement (up from 55 to 65 percent); and analysis of student achievement to guide teaching and learning (up from 55 to 63 percent). These changes in related areas provide evidence of an increasing emphasis in primary schools on assessment for learning and involving students in target setting.

In the secondary survey, there was more evidence of shifts. There was an increase of at least 10 percentage points in the proportion of teachers rating as good or very good the sharing of teaching ideas, the mentoring of beginning teachers, analysis of student achievement to guide teaching and

learning, and support for taking risks in teaching. There was a smaller but nevertheless substantial increase in the perceived quality of almost every other item. The areas which had seen the biggest improvement in primary schools (such as target setting—see above) had also improved in secondary schools, although the proportion of secondary teachers rating them good or very good remained much lower than the proportion of primary teachers in the recent surveys.

An improvement in peer observations, and related feedback, may indicate a shift in the culture of secondary schools—a greater openness among teachers to the presence of colleagues in their classrooms.

Table 22 **Teachers' perceptions of school culture, 2003 and 2006/07**

Perceptions of school culture (% sums good/very good ratings)	Primary		Secondary	
	2003 (*n* = 431) %	2007 (*n* = 912) %	2003 (*n* = 744) %	2006 (*n* = 818) %
Sharing of teaching ideas between teachers	67	69	51	62
Sharing of teaching resources between teachers	66	66	56	61
Sharing of assessment resources between teachers	64	64	61	60
Sharing of lessons and planning between teachers	62	62	41	52
Mentoring of provisionally registered teachers	59	61	NA	NA
Mentoring of beginning teachers	NA	NA	46	58
Support for taking risks in teaching	48	54	24	34
Receiving feedback on own teaching from other teachers' observations	31	33	22	29
Observing each other's teaching	21	23	18	25
Setting educational goals with students	48	60	27	34
Setting useful targets for student achievement	55	65	29	38
Analysis of student achievement to guide teaching and learning	55	63	28	39

NB: Percentages add to more than 100 because multiple responses were possible.
NA = item not included for this group/year.

Teachers (primary and secondary) were asked to indicate the source(s) of their most useful ideas for their teaching programme over the past two years. The same question was asked in 2003, and responses from both surveys are summarised in Table 23.

Table 23 **Sources of teachers' most useful teaching ideas in the two years prior to survey**

Sources	Primary		Secondary	
	2003 (*n* = 431) %	2007 (*n* = 912) %	2003 (*n* = 744) %	2006 (*n* = 818) %
Other teachers in the school (informal)	60	72	56	67
Ongoing whole-school PD	69	69	35	31
One-off courses/conferences/PD	48	55	52	60
TKI	34	41	17	30
Internet	21	39	27	38
Adviser/teacher-support service	44	36	30	23
Invited facilitator	44	36	NA	16
Friends who teach in other schools	NA	32	NA	NA
Action research/inquiry learning	NA	32	NA	6
Personal education/training	19	31	26	40
Reading/research findings	37/18 (sep. items)	31	54	39
Learning community in own school	NA	27	NA	12
asTTle assessment tools	NA	24	NA	11
Visit to another school	27	20	16	22
New curriculum support materials	34	19	15	10
ARBs (Assessment Resource Banks)		17	NA	NA
Other assessment tools	17 for all tools	13	NA	4
PAT assessment tools		9	NA	2
Subject association	NA	NA	NA	26
NCEA	NA	NA	28	12

NB: Percentages add to more than 100 because multiple responses were possible.
NA = item not included for this group/year.

In both years, ongoing whole-school PD was mentioned by a third of secondary teachers and two-thirds of primary teachers. However, one-off courses were mentioned more commonly by secondary teachers, suggesting that the style of PD tends to vary somewhat between the sectors. Informal exchanges with colleagues were the most common source of useful ideas for secondary teachers in 2003, and the proportion citing them increased in the later (primary and secondary) surveys, so they are now the most common source for primary teachers as well. This finding highlights the importance of a collaborative learning climate, with a free interchange of ideas between members of the school staff.

Teachers from schools with fewer than 400 students were more likely than those from larger schools to say that their most useful ideas had come from asTTle assessment tools (30 percent, compared with 9 percent). Teachers from low-decile schools were also more likely to say this (19 percent, compared with mid-decile, 11 percent; and high-decile, 5 percent).

Teachers from state-integrated schools were more likely than those from state schools to cite one-off courses/conferences (76 percent, compared with 58 percent) and subject associations (40 percent, compared with 24 percent).

The proportion of teachers deriving ideas from Te Kete Ipurangi (TKI), the MOE-funded resource site for education, the Internet generally, and personal education/training had increased substantially since 2003. Teachers from low-decile schools were more likely than others to cite TKI (41 percent, compared with mid-decile, 31 percent; and high-decile, 23 percent).

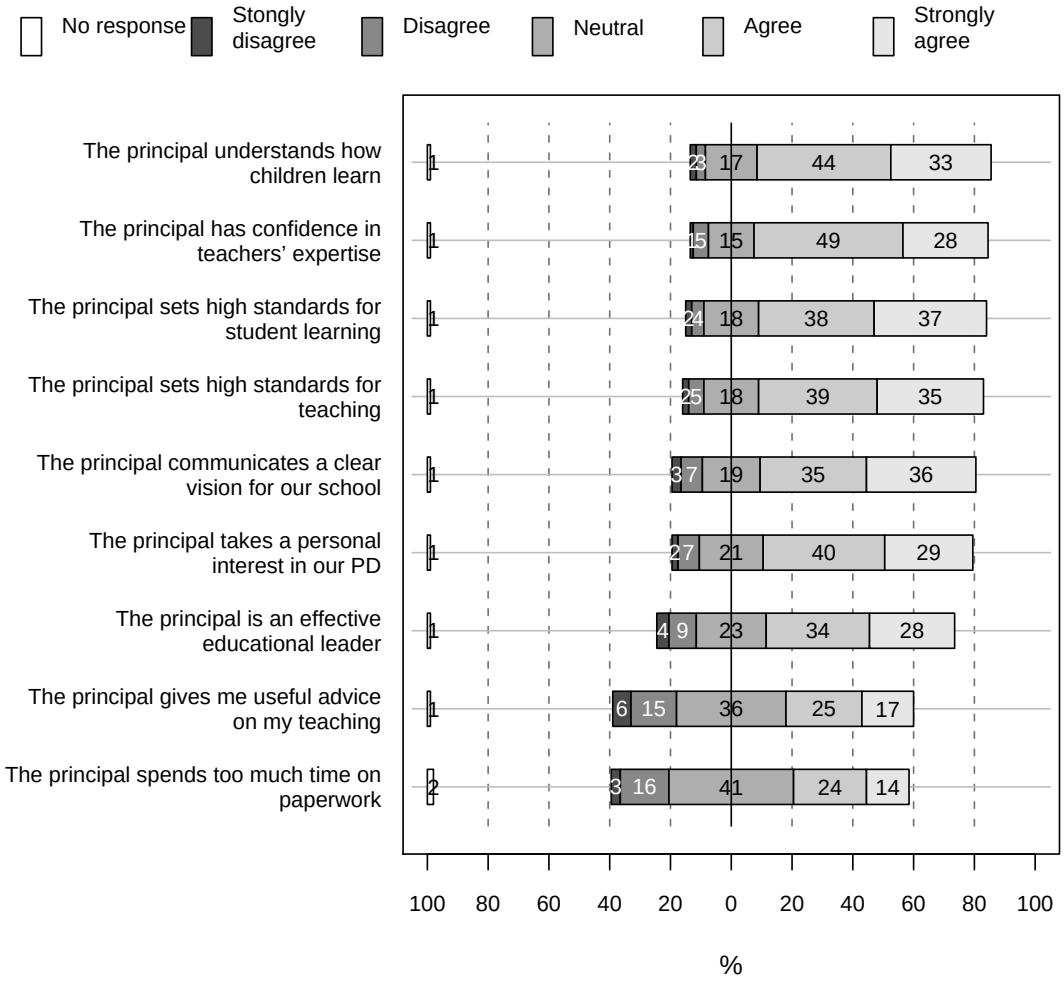
There was a decrease in the proportion of teachers (primary and secondary) citing the Schools Support Service, curriculum support materials, and reading/research findings. The latter could be due to lack of time, and/or the fact that teachers are becoming accustomed to deriving their ideas from other sources, e.g., the Internet.

7.3 The importance of supportive relationships

The creation of a collaborative learning climate, in which teachers feel free to exchange and try out new ideas, depends on the existence of supportive relationships between colleagues. James and McCormick (2007) stress the need for a shared vision, collaborative knowledge creation and sharing, and systems of support for PD, which include teachers being released to plan together and encouraged to experiment and take risks with their practice. The teacher surveys included questions designed to explore this aspect of school life.

As James and McCormick note, "school leaders, subtly or more directly, change structures and shape culture" (p. 15). It is important that teachers have confidence in their principal, and primary teachers were asked to provide an indication of how they rated their principal on various aspects of their role. Responses are summarised in Figure 17; they show that principals on the whole were highly regarded by their staff.

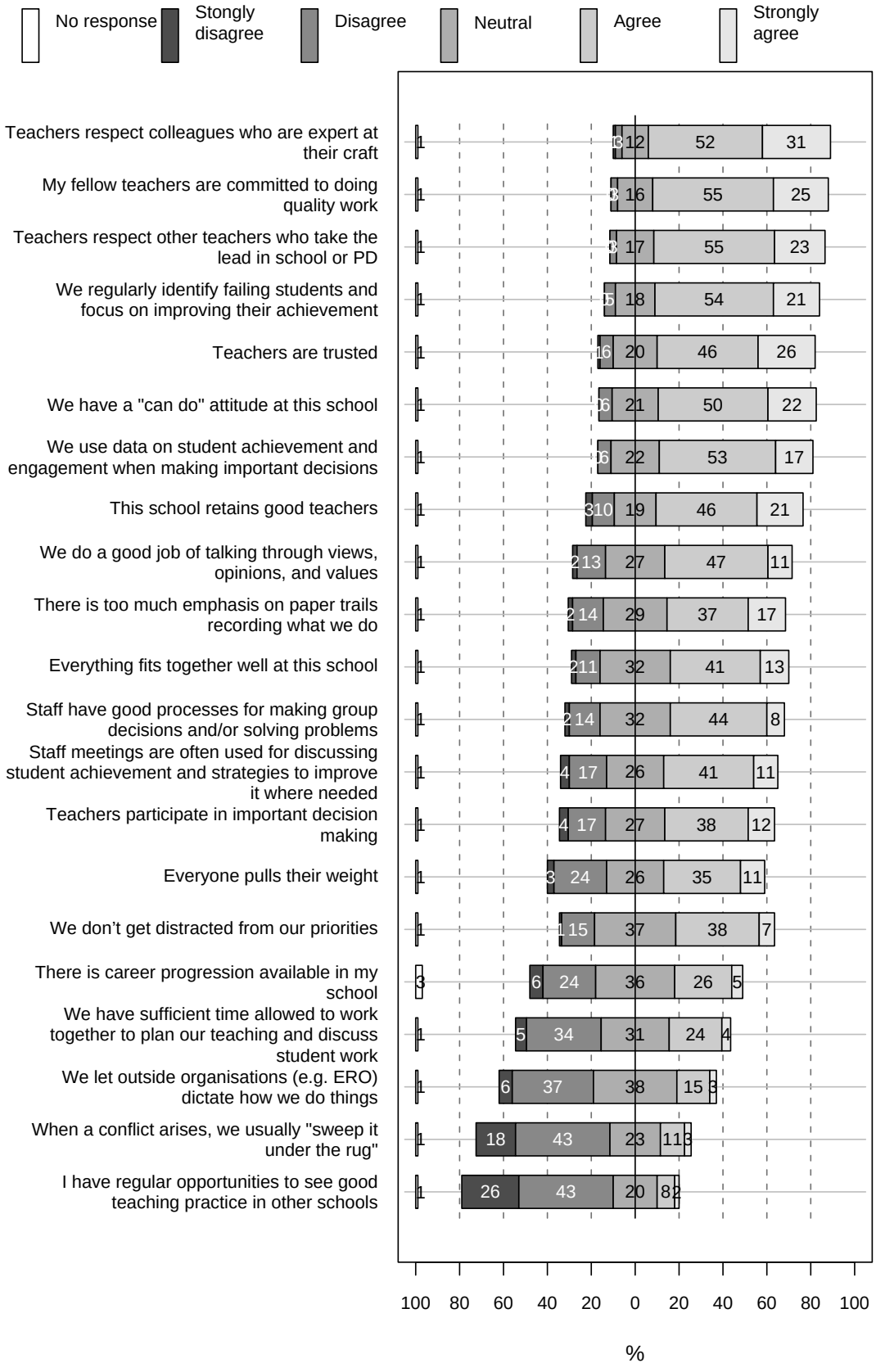
Figure 17 **Primary teachers' perceptions of their principal**



More than two-thirds of the responding teachers agreed or strongly agreed with the first six statements in the table. In each case a substantial number (ranging from 15 to 21 percent) remained neutral, but no more than 10 percent disagreed. Teachers were somewhat less positive about their principal as an effective educational leader (the majority agreed, but 13 percent disagreed, and a quarter remained neutral, or did not answer). Of greater concern, only 42 percent agreed that their principal gave them useful advice on their teaching, and one in five positively disagreed with the statement.

Primary teachers were also asked to rate aspects of school culture in general, as shown in Figure 18.

Figure 18 **Primary teachers' perceptions of aspects of the culture in their school**



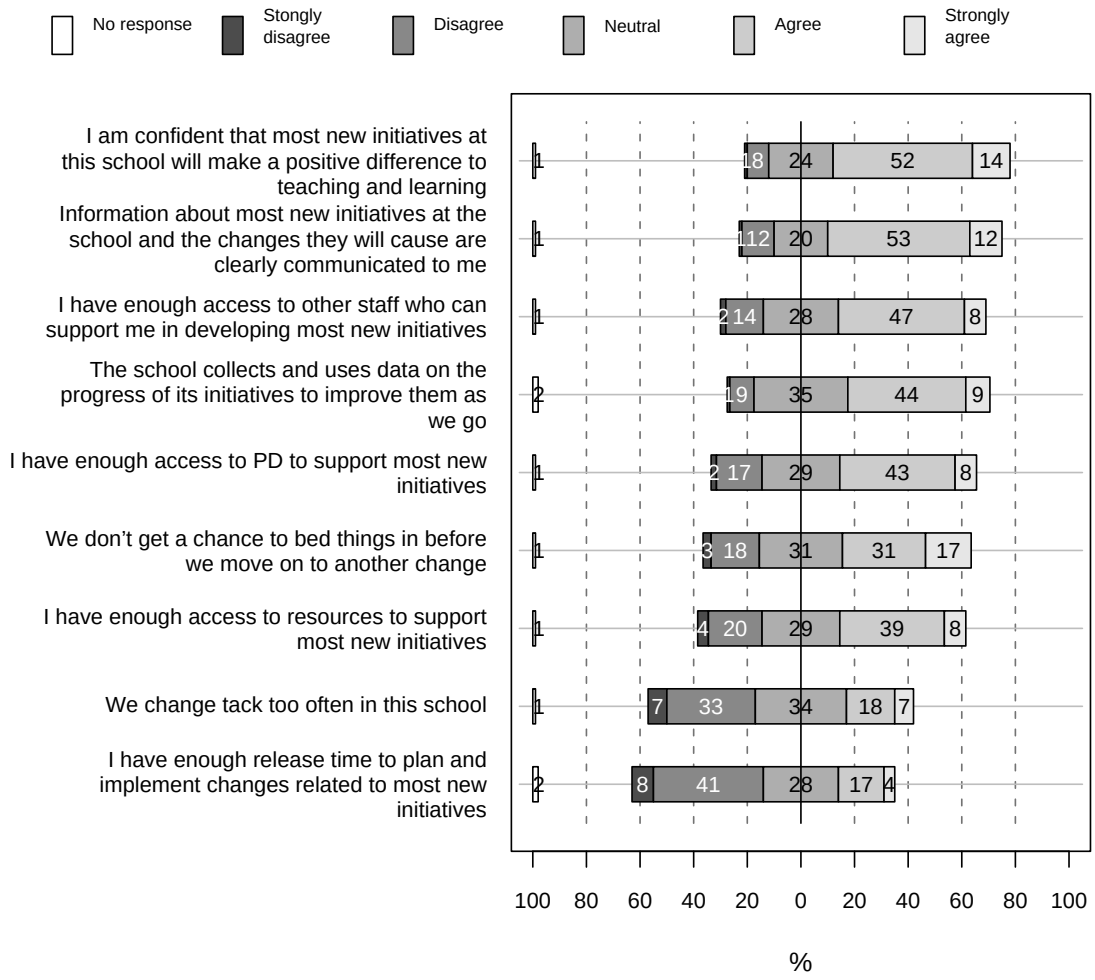
A majority of teachers (in some cases, a very large majority) agreed with most of the positive statements. They believed that their colleagues were committed to doing quality work, and that there was mutual respect for teachers' skills. (However, their respect for colleagues was not universal, since less than half agreed that "everyone pulls their weight".) Nearly three-quarters felt that teachers were trusted, though 20 percent remained neutral on this, and 7 percent disagreed.

On the subject of career progression, primary teachers were divided: one-third agreed that it existed in their school, but almost as many disagreed, and a larger proportion remained neutral. Since the number of senior posts in a primary school is inevitably limited, this is perhaps not surprising. However, it is of concern that only just over one-quarter felt that they had sufficient time allowed to work together to plan their teaching and discuss student work. The creation and maintenance of a collaborative climate which enables PD and effective teaching, does require time. It also requires opportunities for genuine consultation, with staff participating in decision making and perceiving that their views are valued. In this context, it should be noted that exactly half the respondents agreed that teachers participate in important decision making, and a similar number felt that there were good processes for decision making and problem solving.

Ten hours per term of classroom release time for full-time teachers was included in the primary national collective employment agreement to take effect from late 2005. This amount of time does not seem to have met the need of schools for teachers to have time to work together for student learning, as well as working directly with students.

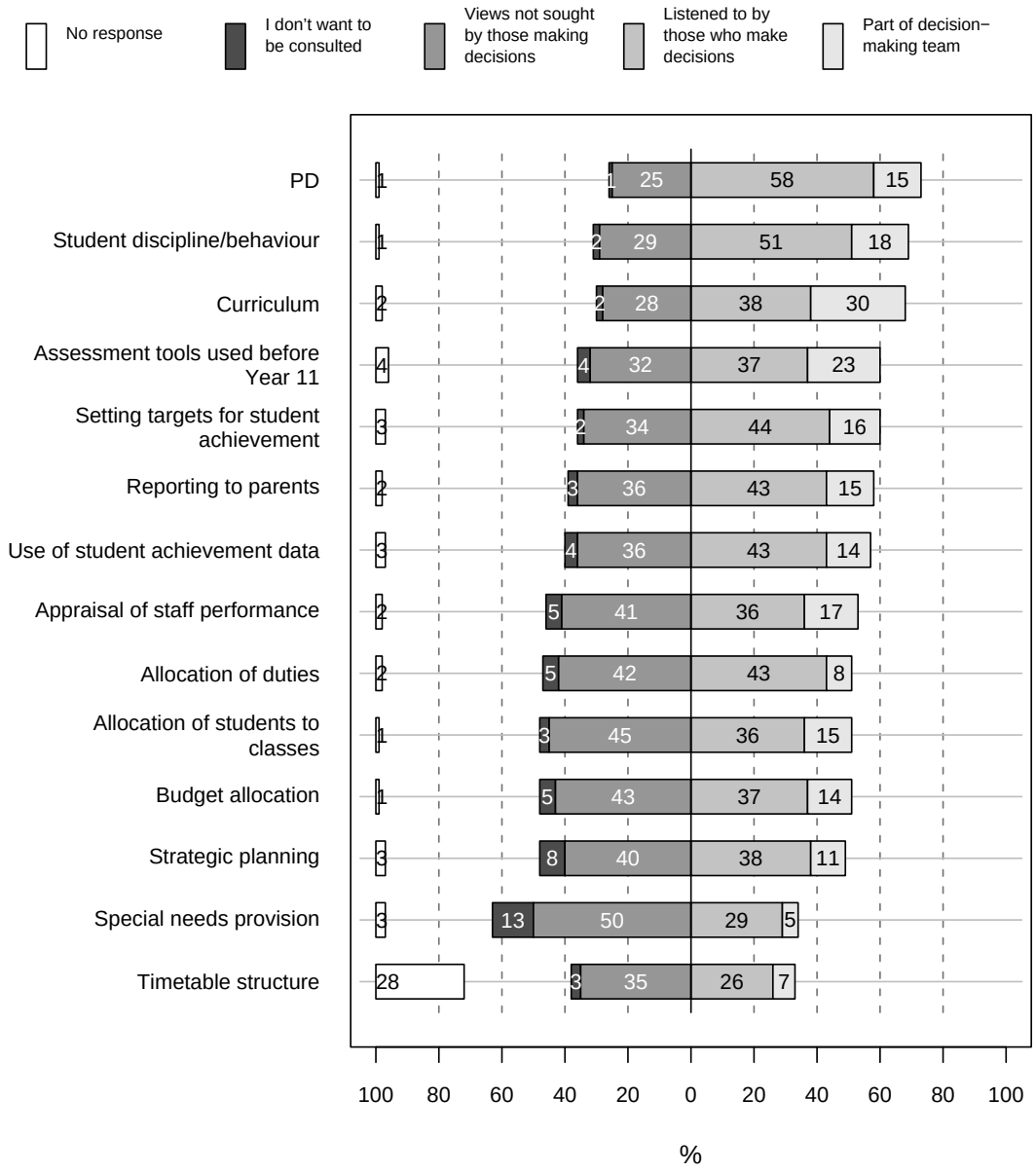
On a related theme, primary teachers were also asked for their views about how their school tackled new initiatives (see Figure 19). Two-thirds were confident of the value of new initiatives, and said that information about them was clearly communicated. A smaller proportion (approximately half) said that they had enough support and resources to enable them to deal with new initiatives. However, almost half felt that there were too many initiatives in their school, and less than a quarter agreed that they had enough release time to plan and implement the necessary changes. This is something that needs to be borne in mind by policy makers and others responsible for school-based initiatives, as well as school managers.

Figure 19 **Primary teachers' perceptions of implementation of new initiatives in their school**



The three sets of questions above were not asked of secondary teachers, but they were asked a question relating specifically to their involvement in decision making (see Figure 20). A majority of secondary teachers said that they were part of the decision-making team, or (more commonly) were listened to by decision makers, in almost all of the topics listed. The proportion agreeing dropped to a third for the final two items but this is perhaps not surprising: not all teachers would be involved in special needs provision, and the timetable structure would probably be determined by a small number of senior managers (which could explain why 28 percent did not answer that question). It is of more concern, perhaps, that 40 percent of teachers felt that their views were not sought with regard to strategic planning; consultation is surely necessary if staff are to feel ownership of ideas and be enthusiastic about implementing them.

Figure 20 **Secondary teachers' involvement in decision making**



Closer analysis of responses by teacher role confirmed these assumptions. On most items, senior managers were much more likely to be members of the decision-making team than middle managers, who in turn were more likely to be involved than classroom teachers. But while a large majority of senior managers were involved in, for example, the curriculum (83 percent), reporting to parents (80 percent), strategic planning, and discipline (both 78 percent), only 20 percent (and 2 percent of classroom teachers) were on the decision-making team for special needs. Two-thirds of senior managers said that they were listened to in that area, but 56 percent of class teachers said that they were not consulted, and a further 14 percent did not wish to be asked.

Nearly half of the senior managers were involved in making decisions about timetable structure, but again only 2 percent of class teachers, and only a further 18 percent of the latter said that they

were listened to: the remainder said they were not asked (42 percent), did not wish to be asked (6 percent), or did not answer the question (33 percent), indicating no doubt that they perhaps did not expect to be involved.

There were some interesting differences by gender. On some items, women teachers were at least as likely as men to say that they felt part of the team, but they were less likely to say that their views were listened to (budget allocation, 33 percent compared with 44 percent; allocating students to classes, 31 percent compared with 43 percent; appraisal of staff performance, 33 percent compared with 40 percent). They were correspondingly more likely to say that their views were not sought by the decision-making team.

There were also differences by age, although the pattern was not entirely clear. The middle age group (those aged 40–49) were least likely to say that they had not been consulted about a number of items. Perhaps younger teachers are considered not sufficiently experienced, and older teachers not sufficiently au fait with modern thinking?

It may be, however, that secondary teachers would like to be consulted in some of the areas where they indicated "not asked", or be more directly involved in those areas where their views were "listened to". A separate question asked whether there were any areas of the school's life where they felt they should be involved in decisions, but were not. Responses were evenly divided: 42 percent said yes, the same proportion said no, and the remainder were unsure, or did not answer the question. Those who answered affirmatively included 12 percent of senior managers (presumably their principal was accustomed to making unilateral decisions) and 41 percent of middle managers. The question was a straight yes/no, so the responses do not tell us in which areas the teachers wanted greater involvement.

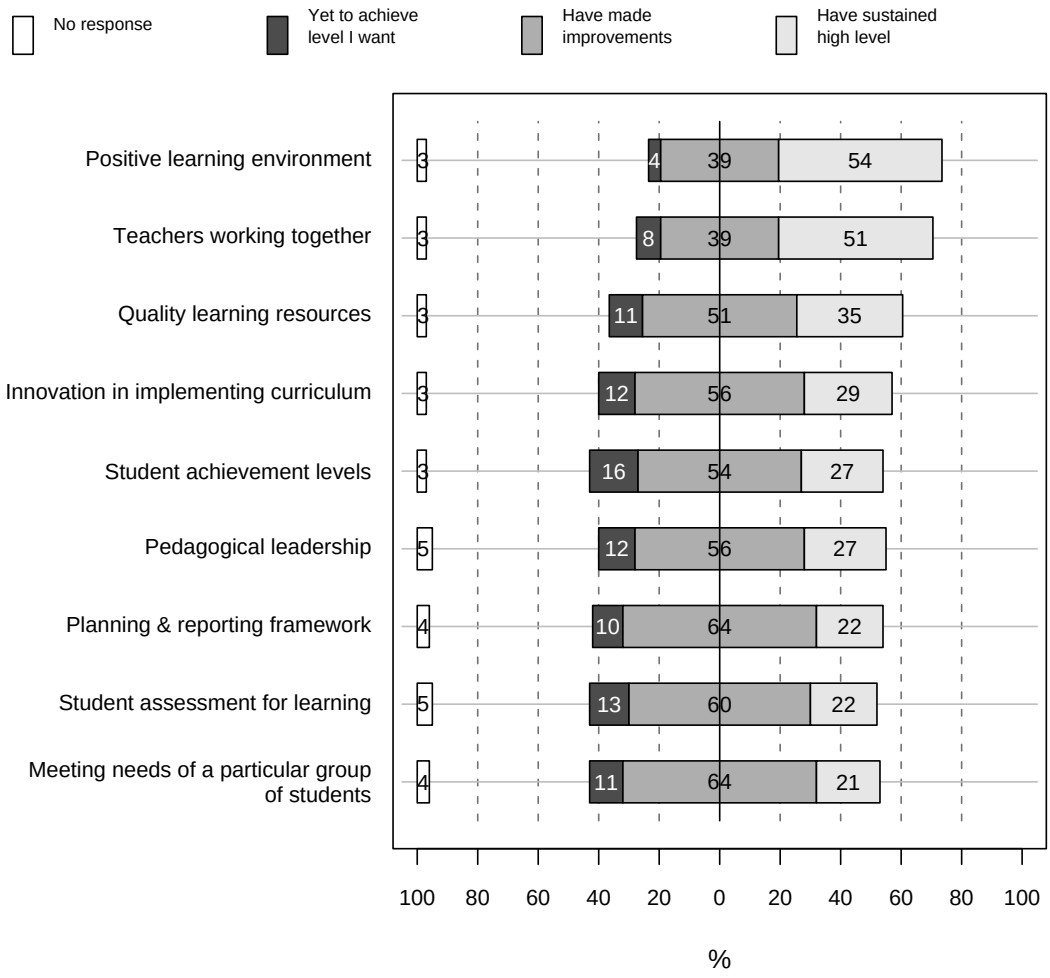
It is not possible to directly compare the views of primary and secondary teachers on participation, as they were not asked the same question. As noted above, half of the primary respondents said that teachers were involved in important decision making (Figure 18). However, the depth of that involvement is unclear, since they were not asked to distinguish, as secondary teachers were, between being part of the decision-making team, and being consulted by decision makers.

7.4 Successful innovation as a source of professional satisfaction

All principals were asked to indicate their main achievements during the past three years. Responses to curriculum-related items are illustrated in Figures 21 (for primary principals) and 22 (for secondary). Over 80 percent of primary principals believed that they had sustained a high level, or made improvements, in all of the areas mentioned. Given responsibility for self-managing schools, this table provides evidence of where they have chosen to put their efforts. A minority of principals admitted that they were yet to achieve the level they wanted; the proportion

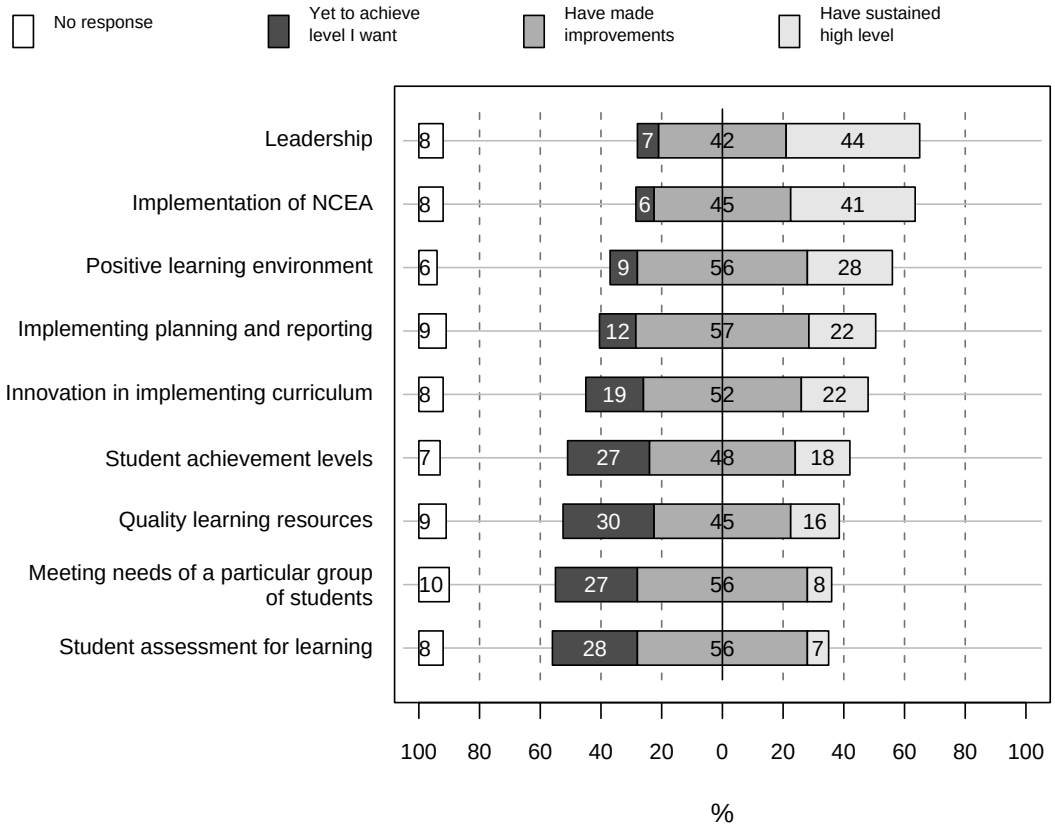
ranged from only 4 percent (yet to reach their goal of a positive learning environment) to 16 percent (for student achievement).

Figure 21 **Primary principals' ratings of their curriculum-related achievements**



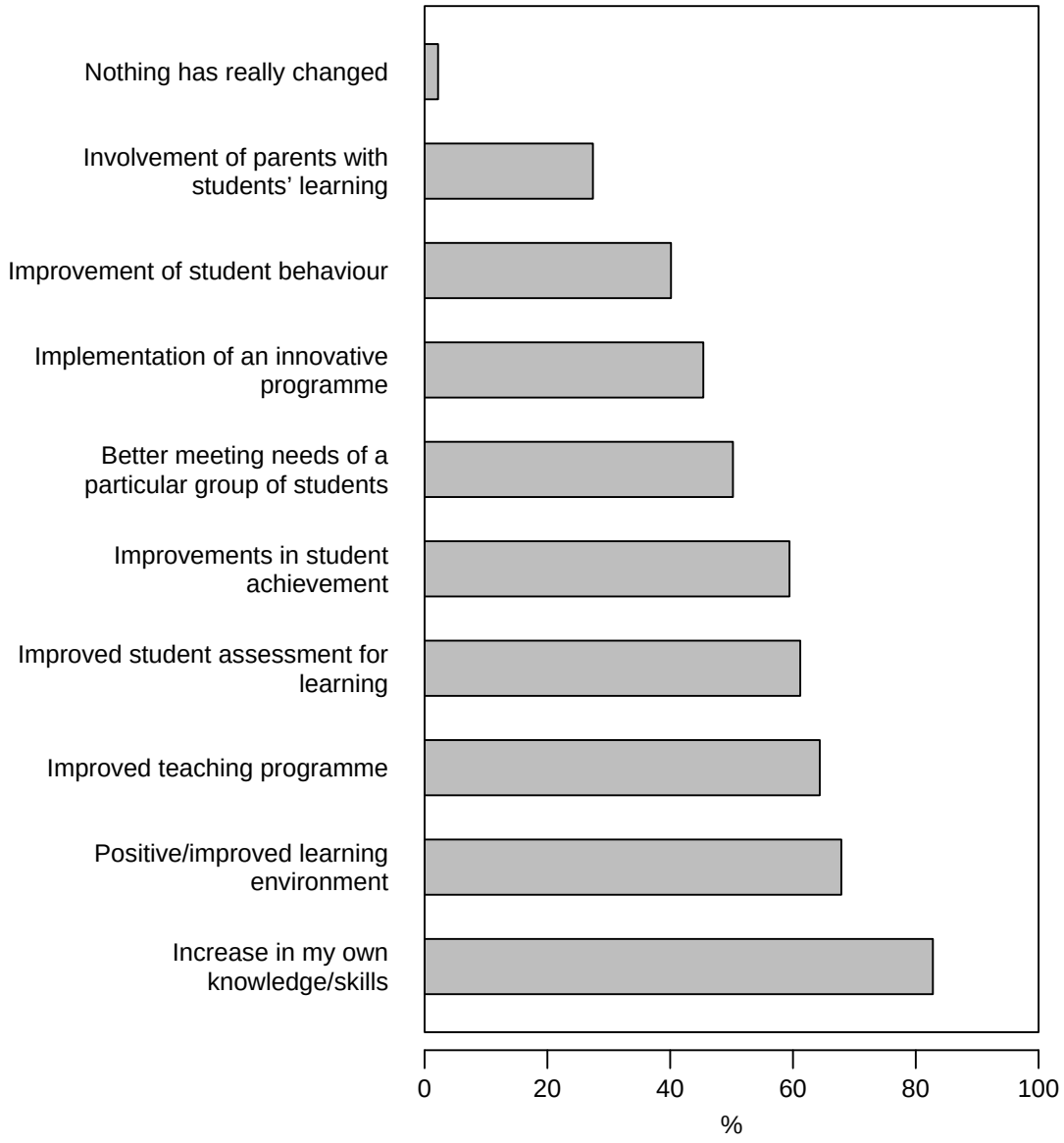
Secondary principals' responses to curriculum-related items indicate a much larger degree of dissatisfaction with their achievements. More than a quarter said they had yet to reach their desired level in terms of student achievement, quality learning resources, meeting the needs of a particular group of students, and student assessment for learning. All of these proportions represented double (in some cases more than double) or almost double those of primary principals to the same item. This may reflect the greater complexity involved in achieving change across the diverse areas of the secondary school.

Figure 22 **Secondary principals' ratings of their curriculum-related achievements**



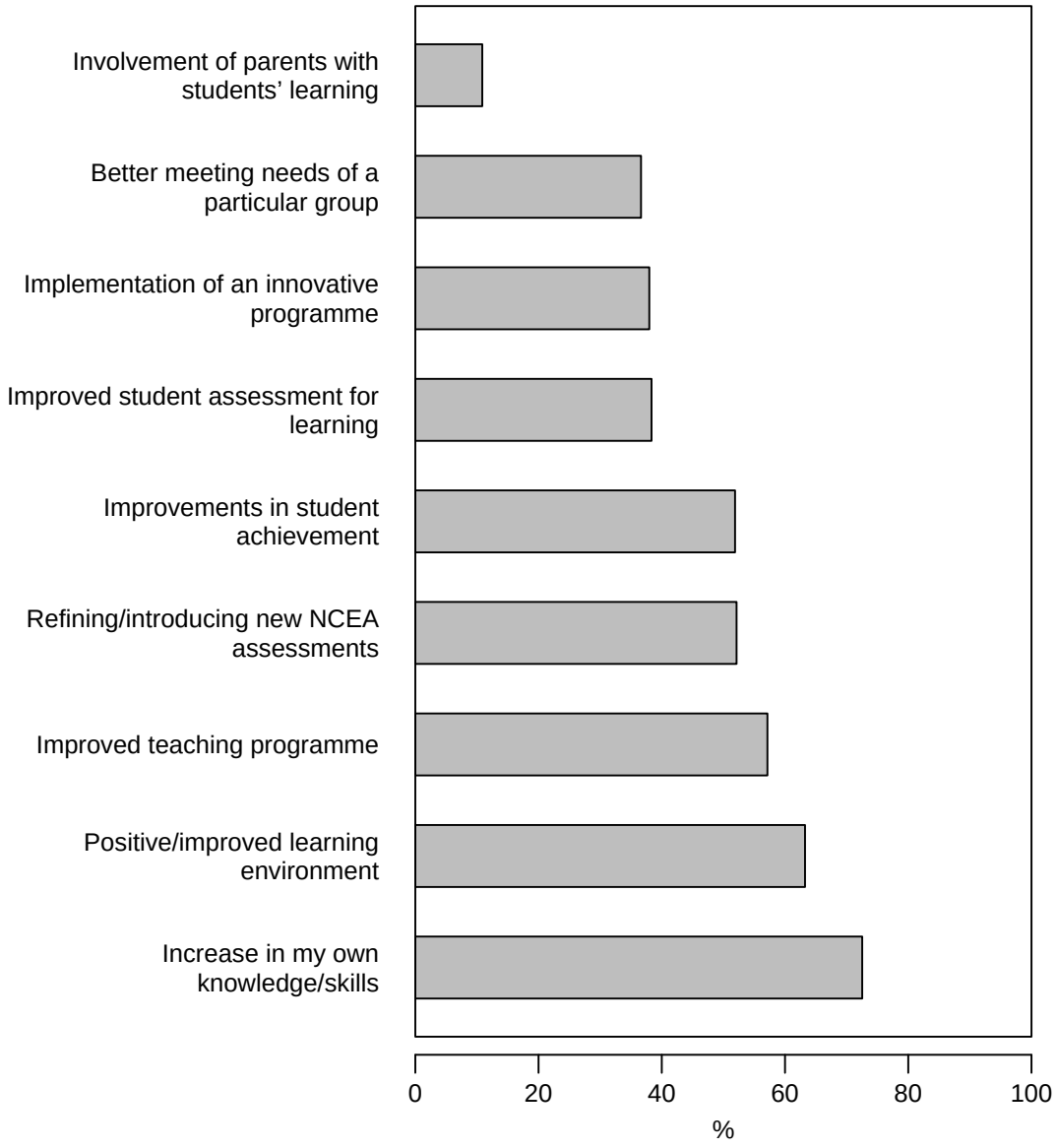
Teachers were also asked to identify their main achievements, and their responses are summarised in Figures 23 (primary) and 24 (secondary). Very few primary teachers said that nothing had really changed. More than 80 percent had experienced an increase in their own knowledge/skills, and a majority had also seen an improvement in their learning environment, teaching programme, student assessment for learning, and student achievement. Fewer, but still a substantial minority, had seen an improvement in student behaviour and parental involvement.

Figure 23 **Primary teachers' ratings of their curriculum-related achievements**



Secondary teachers tended to be slightly less positive than their primary counterparts in their assessment of their recent achievements, but their ranking of common items was similar. More than half cited an improvement in student achievement and refining or introducing the new NCEA assessments.

Figure 24 **Secondary teachers' ratings of their curriculum-related achievements**



The fact that an increase in personal knowledge/skills was the top-rated item among primary and secondary teachers suggests that both groups had a strong sense of ongoing learning. On the other hand, assessment for learning was mentioned by 38 percent of secondary teachers compared with 61 percent of primary teachers (there was also a similar, albeit smaller, difference in terms of teachers reporting that their achievements included better meeting the needs of a particular group of students).

7.5 Summary

Primary principals had taken part in a wide range of PD activities with their staff, and most of this was valued highly. Nevertheless, half or more schools had *not* had recent PD in key areas such as literacy, the key competencies, and positive approaches to student behaviour. This could be due to the need to prioritise, since schools can only take on so many changes at a time, and to lack of funding, as only one-third of principals said that the schools could afford the PD needed.

Teachers in both primary and secondary schools rated the quality of interactions related to professional learning more highly in the recent survey than in 2003. Responses in both sectors reflected the growing use of target setting and assessment for learning. In secondary schools there was also an increase in positive ratings for sharing ideas between teachers, and peer observation, indicating a growing openness between colleagues. Consistent with this, informal exchanges with colleagues are now seen by primary and secondary teachers as the most common source of useful ideas for their teaching.

The majority of primary teachers valued highly their principal's leadership skills, yet less than half said that they gave them useful advice in teaching. Teachers generally had high regard for their colleagues (despite doubts about everyone pulling their weight), and a positive view of most aspects of school culture. However, views on career progression were mixed, and only a minority felt that there was enough time for working and planning together. On the whole, teachers were positive about new initiatives in the school, but once again time was an issue—only one in five felt that they had enough release time to plan and implement change.

The majority of secondary teachers reported that they were consulted, or were part of the decision-making team, on most relevant topics. However, nearly half said that there were areas of the school's life where they felt they should be involved in decisions, but were not.

Primary principals rated highly their curriculum-related achievements during the past three years. Over 80 percent said that they had made improvements, or sustained an already high level, in each of nine key areas. Secondary school principals were less positive, with (in most cases) a substantial number saying they had yet to achieve their desired level. However, teachers from both sectors were positive about their recent achievements, with a large majority identifying an increase in their own knowledge or skills, which suggests a strong sense of ongoing learning.

8. Barriers to innovation

In previous chapters we have considered curriculum priorities, and initiatives which have been implemented in primary and secondary schools. It may of course be the case that there are other innovations which principals or teachers feel they would like to introduce, but are unable to do so, for a range of reasons. In this chapter we explore:

- the whole-school innovations that principals would like to introduce, and the constraints that prevent them from doing so
- teachers' perceptions of barriers which prevent them from making changes in the curriculum they teach
- changes over time in principals' and teachers' perceptions of barriers
- students' poor behaviour as a barrier to curriculum change.

8.1 Principals' perceptions of barriers to innovation

Principals (primary and secondary) were asked whether there were any innovations which they would like to introduce but felt unable to do so. In both sectors, just over half of the principals replied in the affirmative. Compared with the 2003 survey, this represented a small decrease for primary principals (56 percent in 2003) and a large decrease for secondary (73 percent in 2003).

What were the changes that principals would have liked to make? At least five percent of primary principals responded in each of the following broad categories:

- ICT/technology (20 percent)
- curriculum innovations (11 percent)
- funding for tutors/specialist teachers (8 percent)
- gifted and Talented Education (GATE)/extension classes (8 percent)
- enhanced curriculum (music, languages, etc.) (6 percent)
- to cater better for specific student groups (5 percent)
- property/buildings (5 percent).

Secondary principals gave a wider range of desired changes. Those mentioned most frequently were:

- integrate the curriculum/make major changes to curriculum delivery (9 percent)
- student support/pastoral care (7 percent)
- more ICT use (7 percent)
- curriculum developments (e.g., adding new subject) (6 percent)

- e-learning/videoconferencing (5 percent)
- trade-related/school–business links (5 percent).

Principals were asked to identify the main obstacles to implementing school-wide changes. Their responses are summarised in Table 24. Not surprisingly, perhaps, lack of money and lack of time were the biggest perceived constraints in both sectors.

Staffing levels, and the time taken by reporting and assessment, were perceived as constraints by at least 20 percent of the secondary respondents. Staffing levels and time for reporting were of similar concern to 20 percent or more of primary principals, but time taken by assessment was much less of a problem (since they were not dealing with the NCEA). Some principals evidently had doubts about the capacity of their existing staff to implement changes (mentioning lack of staff expertise, and lack of staff commitment/energy); suitable PD might help to address the first if not the second of these issues, but that, too, was considered lacking, as was external advice and support. The cost/availability of relievers was an issue for one in six principals, and national curriculum requirements for 13 percent.

Table 24 **Constraints to whole-school change perceived by principals**

Constraints	Primary (*n* = 196) %	Secondary (*n* = 194) %
Lack of money	39	38
Lack of time	34	35
Lack of time for staff to work together	30	NA
Lack of money for good PD	27	NA
Time taken by reporting/compliance	22	20
Staffing levels	20	25
Cost/availability of relievers	17	15
Lack of staff expertise	16	14
Lack of time for PD	16	NA
Lack of staff commitment/energy	15	19
National curriculum requirements	13	13
Lack of suitable PD	11	10
Lack of external advice/support	11	5
Roll decline	9	7
Time taken by assessment/[NCEA]	8	25
ERO criteria	8	NA
Lack of teaching resources	7	6
Parents' expectations	6	3
Conservative community	6	7
Staff reluctance to have relievers take class	5	5
Poor student behaviour	4	5
Other	4	2
My own lack of knowledge/confidence	3	NA
Lack of BOT commitment	3	2
Lack of assessment tools	2	NA

NB: Percentages add to more than 100 because multiple responses were possible.
NA = item not included for this group.

Changes over time

Primary principals' responses were compared with those from the 2003 survey, and the results for common items are shown in Table 25. The overall picture is very similar, indicating relatively little change over the intervening four years. The biggest changes were in staffing levels (a

constraint for 20 percent in 2007, compared with 15 percent in 2003), parental expectations, and "conservative community" (both up from less than 2 percent in 2003 to 6 percent in 2007).

Table 25 **Main barriers to school-wide change in 2003 and 2007 (primary)**

Main obstacles to implementing school-wide changes	2003 (*n* = 254) %	2007 (*n* = 196) %
Lack of money	37	39
Lack of time	37	34
Staffing levels	15	20
Lack of staff expertise	14	16
Lack of staff commitment/energy	14	15
National curriculum requirements	15	13
Lack of suitable PD*	12*	11
Lack of external advice/support	8	11
Lack of teaching resources	6	7
Parents' expectations	<1	6
Conservative community	<1	6
Poor student behaviour	2	4
Other	1	4
Lack of BOT commitment	<1	3

NB: Percentages add to more than 100 because multiple responses were possible.

* Lack of PD and wrong kind of PD.

A similar comparison was made with the secondary responses, and the results are shown in Table 26. The proportion citing lack of money, lack of time, the time taken by assessment/NCEA, and the national curriculum requirements had decreased considerably since 2003, but concerns about staffing (lack of staff commitment/energy; lack of PD) had increased.

Table 26 **Main barriers to school-wide change in 2003 and 2006 (secondary)**

Main obstacles to implementing school-wide changes	2003 (*n* = 95) %	2006 (*n* = 194) %
Lack of money	53	38
Lack of time	46	35
Staffing levels	28	25
Time taken by assessment/NCEA	41	25
Lack of staff commitment and energy	11	19
National curriculum requirements	23	13
Lack of PD	5	10
Student behaviour	6	5
Lack of teaching resources	10	6

NB: Percentages add to more than 100 because multiple responses were possible.

It should be noted, however, that the questions asked in the two surveys were not identical. In 2006, principals were asked to identify "the main obstacles to implementing school-wide changes". In 2003, following a question relating specifically to *curriculum or programme innovation*, principals were asked "What are the obstacles?" to implementation. One would expect, therefore, a broader response in 2006, but as noted above, the proportion citing some items had decreased. It may be that principals were more aware of the barriers when thinking about a particular kind of innovation.

8.2 Teachers' perceptions of barriers to curriculum change

Teachers were asked whether there were any barriers to them making changes to the curriculum they taught. Responses for the recent surveys, compared with those given in 2003, are shown in Table 27. The proportion identifying constraints increased in both sectors, but among secondary teachers it had risen from 62 percent to 85 percent—a large increase over just three years.

Table 27 **Teachers seeing barriers to curriculum change, 2003 and 2006**

Teachers who perceive barriers to curriculum change	Primary %	Secondary %
2003 surveys	62	62
2006/2007 survey	70	85

The nature of the barriers perceived by teachers is shown in Table 28. Lack of time was by far the biggest perceived barrier for primary and secondary teachers alike (*n*ote that a quarter of primary teachers specifically mentioned lack of time to work with other teachers). Far fewer cited lack of

money (in contrast with principals, for whom time and money were of similar importance) but this is understandable, since the majority of teachers would not have control over their own budgets. The composition of classes was a big issue in both sectors. More than a third of teachers in each said that class sizes were too big; a similar number of secondary teachers, but fewer primary teachers, said that their class was too diverse. Time taken for assessment was a bigger problem for secondary teachers, who have the NCEA to deal with; the national curriculum requirements were also cited by more secondary teachers (who were surveyed before the revised curriculum was published in draft form).

Table 28 **Barriers to curriculum change perceived by teachers**

Barriers	Primary (*n* = 912) %	Secondary (*n* = 818) %
Lack of time	60	68
Class size is too big	38	37
Lack of teaching resources	28	37
Lack of money	27	31
Class is too diverse	25	39
Time taken for [NCEA] assessments	25	42
Lack of time to work with other teachers	24	NA
National curriculum requirements	21	30
School assessment requirements	19	NA
Poor student behaviour	18	27
I don't have authority	17	25
Parents' expectations	14	16
Lack of staff commitment	13	18
Lack of PD	12	22
Wrong kind of PD	10	20
Staffing levels	9	19
Lack of leadership from the principal	9	NA
The new draft curriculum	5	NA
Lack of BOT commitment	2	3
NCEA requirements	NA	47
Class size is too small	<1	3
Timetabled periods too short	NA	10

NB: Percentages add to more than 100 because multiple responses were possible.

NA = item not included for this group.

The proportion of primary teachers citing a lack of money and national curriculum requirements as barriers to change decreased according to school roll, i.e., these issues were less problematic in larger schools. On the other hand, as might be expected, large class sizes were a greater problem in large schools.

Teachers in high-decile primary schools were more likely to see lack of time, parental expectations, and the time taken for assessment as barriers to change; teachers in low-decile schools were more likely to cite student behaviour and lack of leadership from the principal.

Teachers in rural primary schools were more likely than those in urban schools to see national curriculum requirements and parental expectations as barriers to change (*n*ational curriculum requirements, 32 percent, compared with urban schools, 20 percent; parental expectations, 24 percent, compared with urban schools, 13 percent).

More than a quarter of secondary teachers felt that they did not have authority to make curriculum changes, compared with 17 percent of primary teachers. This doubtless reflects the more hierarchical structure of many secondary schools (as might be expected, classroom teachers were much more likely to say this than middle managers). Like principals (though to a rather lesser degree) teachers identified a lack of commitment among their colleagues. And even more strongly than principals, they felt that there was a lack of appropriate PD.

As in the primary sector, large class sizes were a bigger problem in larger or urban secondary schools. Teachers in state schools were twice as likely as those in state-integrated schools to see student behaviour as a barrier to change (29 percent, compared with 15 percent).

Teachers in high-decile secondary schools were less likely to see any of the following as barriers, compared with those in low- or mid-decile schools:

- lack of money
- lack of teaching resources
- diversity in the class
- student behaviour.

Teachers were asked to rate their own morale, and secondary teachers were also asked how satisfied they were with the way they were appraised, and whether there were areas of school life where they felt they should have been involved, but were not (see Section 7.2; details are also reported in the companion report, (Schagen & Wylie, 2008). Responses to the question about barriers were cross-tabulated against responses to these questions. Not surprisingly, those with low morale, those dissatisfied with their appraisals, and with their involvement in decision making were much more likely to perceive the issues listed as barriers to change. However, cause and effect cannot be inferred: it could be that the range of barriers experienced leads to low morale, but it could also be that low morale leads teachers to perceive more aspects of school life as barriers to change.

Changes over time

The barriers cited by primary teachers in 2007 were compared with responses to common items in the 2003 survey. The results are shown in Table 29.

Table 29 **Primary teachers' perceptions of barriers to change, 2003 and 2007**

Barriers to making changes to the curriculum they teach	2003 (*n* = 431) %	2007 (*n* = 912) %
Lack of time	51	60
Class size	25	38
Lack of teaching resources	14	28
Lack of money	20	27
National curriculum requirements	34	21
Poor student behaviour	17	18
Parents' expectations	13	14
Lack of staff commitment	4	13
Lack of PD	8	12
Wrong kind of PD	6	10
Staffing levels	10	9
Other	2	3
Lack of BOT commitment	2	2

NB: Percentages add to more than 100 because multiple responses were possible.

Some constraints have become much more evident since 2003: there has been a large increase in the proportion of teachers citing lack of time/money, class size, lack of teaching resources, and lack of staff commitment. Class sizes have not changed significantly, but 38 percent of teachers now see this as a barrier to curriculum change, compared with 25 percent in 2003, perhaps because of the greater emphasis on personalised learning, and assessment for learning. The teaching resources available in 2003 are presumably still available, but production has apparently not kept pace with curriculum and policy developments (and teachers' standards may also have risen in the interim). It is a concern that the number citing lack of staff commitment as a barrier, though still only 13 percent, has trebled since 2003; the reason for this is unclear, but the ageing workforce and a period of rapid change could be possible factors.

On the positive side, the number seeing national curriculum requirements as a barrier to curriculum change has dropped considerably since 2003. The new curriculum makes the mandate for school-based curriculum design more explicit, and teachers evidently recognise the greater freedom it gives in this respect. However, this is the only positive change: some items (such as student behaviour and parents' expectations) have remained essentially the same, but no other item has seen a substantial drop since 2003. It appears that many barriers to curriculum innovation have not yet been overcome.

A similar analysis of secondary teachers' responses was undertaken, and the results are summarised in Table 30. As in primary schools, more teachers saw lack of time, money, and teaching resources as barriers in the recent survey, compared with 2003.

Table 30 **Secondary teachers' perceptions of barriers to curriculum change, 2003 and 2006**

Barriers to making curriculum changes	2003 (*n* = 744) %	2006 (*n* = 818) %
Lack of time	50	68
Time taken for NCEA assessments	40	42
Lack of teaching resources	26	37
Lack of money	24	31
National curriculum requirements	32	30
Poor student behaviour	27	27
Lack of PD	14	22
Wrong kind of PD	13	20
Staffing levels	14	19
Lack of staff commitment	7	18
Parents' expectations	7	16

NB: Percentages add to more than 100 because multiple responses were possible.

As with primary teachers, there were increased concerns about PD and staff commitment. The proportion of secondary teachers citing national curriculum requirements had not changed much (contrast with the large decrease among primary teachers), perhaps because the secondary survey was carried out earlier, and teachers were less familiar with the revised curriculum. On the other hand, there was a much larger increase among secondary teachers in the proportion seeing parental expectations as a barrier to curriculum change. This could possibly be due (at least in part) to the negative publicity about NCEA in the media.

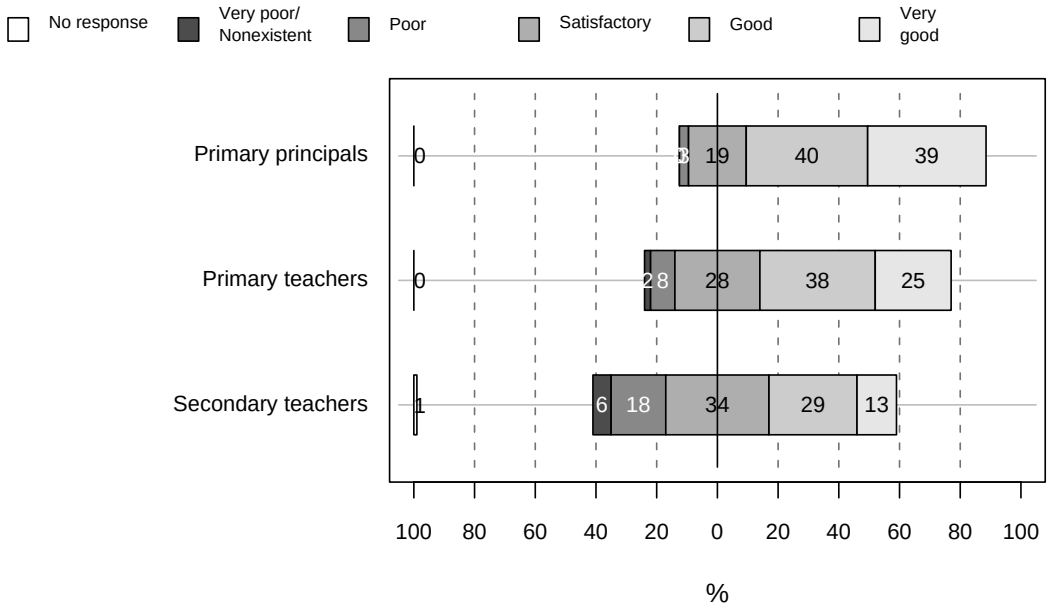
8.4 Poor behaviour as a barrier to change

As Table 28 shows, student behaviour was recognised as a barrier to curriculum change by 18 percent of primary teachers, and 27 percent of secondary teachers. (The proportion of principals who saw it as a barrier to whole-school change was much smaller—see Table 24.)

As part of a question on school culture, all teachers and primary principals were asked to rate their school's "consistent positive approach to student behaviour and discipline". Responses are illustrated in Figure 25. Most primary principals and teachers feel their school has such an approach, and more so than do secondary teachers. Primary principals were much more positive

than primary teachers in their assessment of the school's approach to behaviour and discipline. Well over a third of principals rated it "very good", compared with only a quarter of teachers.

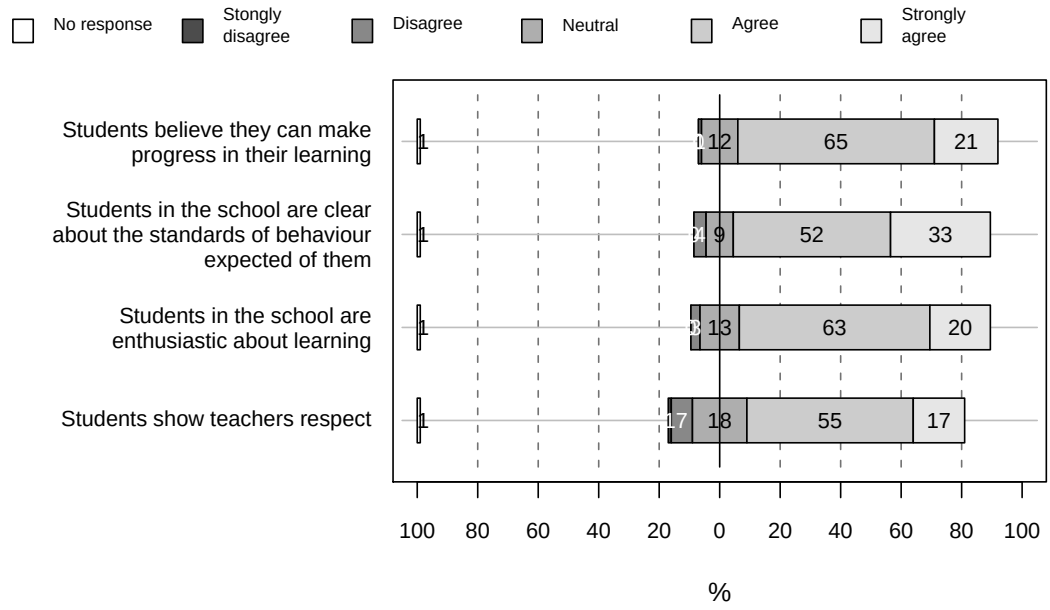
Figure 25 **Perceptions on whether there is a consistent positive approach to student behaviour and discipline in the school**



Secondary teachers were more negative in their assessment than primary teachers, though in this case there are no principal perceptions to compare with. Only 42 percent (in contrast with 63 percent of primary teachers) believed that their school's approach to behaviour and discipline was good or very good; a quarter rated it as poor, very poor, or non-existent. This raises the question: Are principals and other senior managers aware of how their teachers feel on this subject? And if so, why are steps not taken to improve the situation?

Primary teachers (but no other respondents) were asked to indicate the extent of their agreement with statements about the students in their school. They tended to be very positive in their assessment of their students (see Figure 26). In particular, 85 percent said that students were clear about the expected standards of behaviour. It is difficult to see how this could be the case if the school does not have a good consistent approach to behaviour and discipline, yet only 63 percent of primary teachers thought that their school had such an approach.

Figure 26 **Primary teachers' perceptions about students in their school**



The views of teachers differed according to their school's socioeconomic context. The proportion of teachers agreeing with each of the statements was generally lower (although still a majority, usually a large majority) in low-decile schools. The proportion of teachers from low-decile schools agreeing with the second statement was slightly higher than in mid-decile schools, but lower than in high-decile schools. Sixty-one percent of teachers in decile 1–2 schools agreed that students showed teachers respect, compared with 84 percent of those in decile 9–10 and 70 percent in decile 3–8. Just over half of teachers in low-decile schools (53 percent) agreed with all four of the statements, compared with 79 percent of those from high-decile schools and 62 percent in mid-decile schools.

8.5 Summary

Principals (primary and secondary) identified a range of innovations they would have liked to introduce but felt unable to do so. The main constraints related to time, money, and staffing levels. Lack of staff expertise, commitment, and energy were also mentioned. The picture in primary schools indicated little change since 2003; fewer secondary school principals mentioned lack of time and money in 2006, compared with 2003, but concerns about staffing had increased.

For teachers, lack of time was the biggest barrier to curriculum change, followed by class size or diversity, and lack of teaching resources. Lack of money was further down the list of barriers, probably because most teachers do not deal directly with finances. However, for teachers (in contrast with principals) concerns about lack of time and money had increased since 2003.

Primary principals were more positive than primary teachers in their assessment of their school's approach to behaviour and discipline; primary teachers were in turn more positive than secondary teachers (secondary principals were not asked this question). A large majority of primary teachers believed that their students were clear about expected standards of behaviour, were enthusiastic about learning, and believed that they could make progress.

9. Students monitoring their learning

One of the principles of *The New Zealand Curriculum* is "learning to learn". Students are encouraged "to reflect on their own learning processes and to learn how to learn" (Ministry of Education, 2007, p. 9). One of the five key competencies is *managing self*: students are expected to be self-motivated, to "establish personal goals, make plans, manage projects, and set high standards" (p. 12). In this context, it is important that students should take responsibility for monitoring their own learning, which forms the subject of this chapter.

Teachers were asked how the students in their classes were involved in taking responsibility for their learning. Responses are summarised in Table 31. It is noticeable that the proportion of teachers saying that their students are involved in each of these activities is higher in the primary sector. In some cases, it is much higher; 80 percent of primary schools use student self-assessments of learning, compared with 50 percent of secondary schools, and students are involved with setting expected outcomes in nearly half of primary schools, compared with only one in five secondary schools.

What are the possible reasons for this difference? It could be perhaps that external assessment becomes more important in secondary school, so there is less perceived scope for self-assessment and setting outcomes. Table 10 in Section 4.2 reports that 92 percent of primary teachers, compared with 70 percent of secondary teachers, said their school had focused on assessment for learning as a curriculum initiative. This doubtless accounts for some of the difference in emphasis given to self- and peer-assessment in primary and secondary schools.

Table 31 **Students taking responsibility for their learning**

How students in class are involved in taking responsibility for their own learning	Primary 2007 (*n* = 912) %	Secondary 2006 (*n* = 818) %
Student self-assessments of learning are used	80	50
Students involved in individual goal setting	79	63
Students peer review each other's work	63	47
Students involved with setting expected outcomes/standards	47	19
Students identify their own learning needs	37	31
Students involved with setting topics/context to be taught	29	21
Students involved with setting assessment tasks	14	8
Other	3	2
This is not a feature of my class	2	NA

NB: Percentages add to more than 100 because multiple responses were possible.

NA = item not included for this group.

Teachers in high-decile primary schools were more likely to report that student self-assessment of learning was used (84 percent) and that students were involved with setting the topics/context to be taught (29 percent), compared with low-decile schools (68 percent and 20 percent respectively).

In secondary schools, female teachers were more likely than male teachers to say that students were involved in individual goal setting (67 percent, compared with 56 percent), that student self-assessment of learning was used (56 percent, compared with 41 percent) and that students peer-reviewed each other's work (53 percent, compared with 37 percent). The mean number of methods of student involvement was 2.75 for women teachers, compared with 2.39 for men.

There were also significant differences by subject taught, although the pattern was not always clear. Regression analysis showed that, even when controlling for subject taught, gender was still a significant factor.

The smaller the secondary school, the more likely it was to use student self-assessment of learning (78 percent of those with a roll of 100–249; 64 percent of those with 250–399; but only 47 percent of those with rolls of 750 or more).

9.1 Change over time

Responses from the latest surveys were compared with the findings from 2003. The results are summarised in Table 32 for primary schools and Table 33 for secondary schools. Between 2003 and 2007, there was an increase in the proportion of primary teachers reporting students involved in each of the activities listed, although in some cases (e.g., individual goal setting) the increase was very small. The 2007 figures for self-assessment, peer review, and setting expected outcomes represent a large increase since 2003, but it should be noted that even the 2003 figures are higher than the 2006 figures for secondary schools. The proportion of primary teachers indicating student involvement with setting topics/context to be taught has doubled since 2003, which may reflect the shift to "inquiry learning", which is being used as one means of introducing key competencies into the school curriculum (see Chapter 3).

Table 32 **Students taking responsibility for their learning in primary schools**

How students in class are involved in taking responsibility for their own learning	2003 (*n* = 431) %	2007 (*n* = 912) %
Student self-assessments of learning are used	70	80
Students involved in individual goal setting	77	79
Students peer review each other's work	49	63
Students involved with setting expected outcomes/standards	31	47
Students identify their own learning needs	30	37
Students involved with setting topics/context to be taught	15	29
Students involved with setting assessment tasks	10	14
Other	1	3
This is not a feature of my class	6	2

NB: Percentages add to more than 100 because multiple responses were possible.

As in primary schools, secondary responses in every category increased over time, in some cases by just one or two percentage points, in other cases by a larger amount. Clearly there is a trend, evident in both sectors, towards students taking greater responsibility for monitoring their own learning. However, the difference between primary and secondary schools is not due to the difference in the timing of the latest surveys, as primary schools have been consistently ahead of secondary schools in this area.

Table 33 **Students taking responsibility for their learning in secondary schools**

How students in class are involved in taking responsibility for their own learning	2003 (*n* = 744) %	2006 (*n* = 818) %
Students involved in individual goal setting	52	63
Student self-assessments of learning are used	42	50
Students peer review each other's work	42	47
Students identify their own learning needs	25	31
Students involved with setting topics/context to be taught	18	21
Students involved with setting expected outcomes/standards	18	19
Students involved with setting assessment tasks	5	8
Other	NA	2
This is not a feature of my class	18	NA

NB: Percentages add to more than 100 because multiple responses were possible.

NA = item not included for this year.

9.2 Summary

Students in primary schools were more likely to be involved in target setting, peer review, and self-assessment of learning than those in secondary schools. There was a very large difference by decile: teachers from high-decile primary schools were three times as likely to report student involvement as those in low-decile schools.

Comparing the responses given in the recent surveys with those given in 2003, there is a clear trend in both sectors towards students taking greater responsibility for monitoring their own learning.

10. National standards?

New Zealand schools are required to gather evidence about student achievement, identify areas for improvement, set goals for improvement, plan programmes to achieve this, and report on progress. In the absence of national tests, individual schools decide on their targets, and on the instruments by which they will be measured. Most planning and reporting goals address achievement in literacy and numeracy, since these are the priority areas in the NAGs, and have reliable assessment tools with national benchmarks readily available. According to NZCER surveys (Hipkins, Joyce, et al., 2007) about what schools used for such planning and reporting, around two-thirds of primary schools were using either Assessment Tools for Teaching and Learning (asTTle), or Progressive Achievement Tests (PATs), or both; two-thirds of secondary schools were using NCEA data.

The MOE does not publish the collated results from all schools; comparison would in any case be difficult at present, given that schools are not all using the same tests. From time to time there has been debate about whether New Zealand should standardise the reporting of student achievement. Recently the National Party has indicated that it would introduce national standards in reading, writing, and mathematics if National became the Government. The standards would describe what students should be able to achieve by certain ages, and primary schools would be required to report annually on the school's performance against them.

What purpose would national standards serve, if they were introduced in New Zealand? And who would be expected to benefit—students, parents, schools, or government? In theory, national standards could serve a number of purposes (key among them are school improvement and accountability), and benefit all stakeholders. In practice, there are difficulties in achieving this (see, for example, Schagen, Hutchison, & Hammond, 2006).

This chapter looks first at the views of principals, teachers, and trustees on the possible introduction of national standards, and then at parent views on related issues.

10.1 Views of New Zealand stakeholders

How would New Zealand stakeholders feel about the government setting minimum standards of achievement and requiring schools to report on how well students are meeting those standards? Principals, teachers, and trustees were asked how they felt about this idea. Responses are summarised in Tables 34 (for primary schools) and 35 (for secondary schools). The majority of school stakeholders were either opposed to the idea, or cautious.

Primary principals were most strongly against the idea of government-set minimum standards for students (only 10 percent were in favour, and more than half were against). Teachers were also against the idea, though by a smaller majority (13 percent in favour, and 32 percent against). There was a gender difference here, with male primary teachers having more definite views. Twenty-two percent were definitely in favour, and 41 percent against, while for female teachers the figures were 12 percent and 31 percent respectively.

Trustees' views were very different: 38 percent were in favour, and only 12 percent against. Those who said "it depends" (about half of trustees) were fairly evenly divided as to whether it depended on the standards themselves, on how they were measured, or on the way in which the information was used. These options were not of course mutually exclusive; respondents could and did tick two or three boxes if they wished.

Table 34 **Primary views on regulated minimum standards of student achievement**

View	Principals (*n* = 196) %	Teachers (*n* = 912) %	Trustees (*n* = 329) %
Not in favour	53	32	12
Depends on the standards	34	33	32
Depends on how standards are measured	32	44	47
Depends on how the information is used	37	38	36
In favour	10	13	38
Not sure	8	12	6

Responses from secondary schools reflect a pattern similar to those from primary schools. Principals were strongly against (though the proportion of secondary principals saying an unqualified no was smaller than the corresponding proportion of primary principals) and trustees were in favour. However, in this case teachers were on balance just in favour of the idea, whereas primary teachers were clearly against. As in the primary sector, male teachers were more likely to be in favour than female teachers (31 percent compared to 21 percent).

Table 35 **Secondary views on regulated minimum standards of student achievement**

View	Principals (*n* = 194) %	Teachers (*n* = 818) %	Trustees (*n* = 278) %
Not in favour	45	23	18
Depends on the standards	35	37	35
Depends on how standards are measured	39	45	45
Depends on how the information is used	36	35	34
In favour	10	25	31
Not sure	7	8	6

Why should there be such a difference (in both sectors) according to role? It could be hypothesised that principals recognise that the responsibility for reaching the standards would fall mainly on them, and that they would be the ones in trouble if targets were not met. Alternatively, it could be that principals see most clearly what the imposition of minimum standards would entail, including the potential problems associated with such a move. For example, if a school is judged on the performance of its students, there is a danger of "teaching to the test", resulting in a more restricted and less engaging curriculum. Further, if threshold standards are set, there may be a tendency to focus on borderline students (see, for example, Schagen, 2000), leading to results (at school or student level) which may not be entirely realistic.[11]

A similar question was asked in the 2003 surveys, so it is possible to see whether views have shifted over time, although care is needed because the question was not identical. The "depends on how information is used" option was not given, and the question was single- rather than multiple-response. However, it is possible to simply compare the yes/no answers given on both occasions. Such a comparison for secondary schools indicates some movement in favour of government-set minimum standards. While the proportion saying no had remained more or less constant in all categories, the proportion saying yes had increased—by only a small amount for principals, but quite a substantial change for teachers (up from 14 to 25 percent) and trustees (up from 19 to 31). These changes could relate to the development of better assessment tools; or perhaps concerns over consistency of moderation of teacher-assessed NCEA assessments may have led some to consider the advantages of external marking. However, the moderation issue has been addressed since the survey was conducted, so it is possible that the next survey round will show change in the opposite direction.

In primary schools, the pattern of change over time was very similar for principals and trustees, but not for teachers. While the proportion of teachers saying yes had increased (from 9 to 13 percent) the proportion saying no had also increased, from 26 to 32 percent. Thus the views of primary teachers had not changed but rather hardened over time; they were still against the idea on balance, but in 2006/07 a greater number were taking a definite "for or against" stance.

10.2 Parental interest and concerns

In what way could the introduction of national standards benefit parents? It would require a system of national testing to be developed, which would have major resource implications, but if successfully implemented it could provide parents with relevant information at the individual child and school level. Is this what they require?

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[11] It is for this reason that secondary school teachers in England tend to distrust the levels achieved by students in their final year of primary school, and insist on testing them again (using different instruments) when they arrive in secondary school (Schagen & Kerr, 1999).

Parents surveyed were asked to rate the quality of information they already received from their child's school, and to say whether they would like more information, and if so, what kind.

Primary parents' views

Around two-thirds of the primary parents thought the information they received about their child's progress and learning programme was good or very good (around a quarter thought this information was (only) satisfactory, and 7 percent that it was poor). Nevertheless, 42 percent of the parents would like more information about their child's progress at school (and a further 9 percent were unsure). This fits with a rising trend to want more information—36 percent of parents said they wanted more information in 2003, and 18 percent did so in 1999.

Those parents who said they would like more information (or were unsure) were asked to say what kind of information they would like. The most common request (made by nearly three-quarters of these parents, or 37 percent of all parents) was to know "how my child is achieving compared with others at the same year level". In contrast with the secondary questionnaire (see below) the phrase "national standards" was not used, and so it is not quite clear how this desire should be interpreted. A third of parents obviously wish to know how their child's achievement compares with others of the same age, but does this mean others across New Zealand, or simply those in the same school?

Secondary parents' views

Fifty-nine percent of secondary parents considered information about their child's learning programme to be good or very good, and 64 percent gave the same rating to information about their child's learning progress. Around three in 10 thought this information was (only) satisfactory, and 8 percent that it was poor. While this is not quite as positive as the responses from primary parents, it represents an improvement since the 2003 national survey, when only half the parents rated this information good or very good.

Thirty-five percent of the parents said they would like more information about their child's progress at school, and a further 17 percent were unsure. This counters the trend mentioned above, since 46 percent of secondary parents wanted more information in 2003. Clearly, progress has occurred in secondary schools since 2003 in giving parents the information they want.

Among secondary school parents, the most common request was for information about assessments/tests taken, followed by more detailed information about progress. Comparison with national standards (an explicit option on the secondary parents' questionnaire) was desired by 42 percent of parents wanting more information, or 22 percent of the parents surveyed. It was also desired more by parents who were unhappy with the quality of their child's education (45 percent, compared with 17 percent of those who were happy with the quality of their child's education).

It seems, therefore, that a substantial minority of parents would like the kind of comparison information about their child's progress that could be provided by national standards. It should be noted, however, that information of this kind is already available to many due to the widespread use of standardised tests in New Zealand schools.

Choosing schools

At the school level, national standards can be used for accountability, to measure the success of each school in terms of meeting the standards set by government. Publication of school-level data can result in the creation of "league tables" as happened in England following the 1992 Education Act. It can be argued that league tables are useful for parents in providing information about the quality of their child's school and (in particular) helping them to compare schools and choose the best one for their child.

Parents surveyed were asked what information they used to help them choose their child's current school. The most common answers (from both primary and secondary parents) were:

- School/open day (49 percent secondary, 31 percent primary)
- An older child went to the school (43 percent secondary, 47 percent primary)
- The opinions of other people (29 percent secondary, 40 percent primary)
- Other children they know went there (31 percent secondary, 30 percent primary).

Information gained directly from people therefore seems to be more important than written documentation. However, 26 percent of primary parents (but only 12 percent of secondary parents) said that they had consulted the school's most recent ERO report. It seems reasonable to assume that a similar number might look at league tables if they were available.

The problem is that league tables can easily be misinterpreted; if based on raw test results, they can be positively misleading. The main predictor of examination outcome is prior performance, so a school with an intake of mainly high-ability students is bound to achieve better results than one with an intake skewed towards the lower end of the ability scale. Other factors, such as socioeconomic context, are also influential in determining outcomes. Sophisticated "value-added" analysis is required to take account of these factors, but even if it is included in the league tables, there is a danger that parents (and others) will focus on the headline results.

Because they depend to a large extent on intake, raw examination results can vary from year to year, especially in small schools, where the presence of a few exceptionally high-ability students in a particular cohort could have a significant impact on outcomes. A school's position in the league table could therefore fluctuate considerably without implying anything about standards in the school. For this reason also, league tables can be unreliable guides when choosing schools (see Goldstein & Leckie, 2008).

10.3 Summary

Primary principals and teachers were strongly against the idea of government-set minimum standards of achievement for students, but around a third of trustees were in favour. Many respondents from all three stakeholder groups expressed cautious interest, saying it would depend on the standards, how they were measured, or how the information was used. Secondary sector responses were similar, except that the proportion of teachers in favour was slightly higher than the proportion against.

In general, the 2006/07 responses were more positive than those obtained in 2003; in every category, the proportion of stakeholders saying yes to national standards had increased, but the proportion of primary teachers saying no had also increased.

Almost all parents were satisfied with the information they were given about their child's learning programme and progress, and most rated it good or very good. However, more than a third said they would like additional information. Just under a quarter of secondary parents wanted comparison with national standards; a higher proportion of primary parents wanted to compare the performance of their child with others in the same year group.

When choosing schools, parents tended to rely on information obtained directly from people with relevant experience. However, a minority consulted ERO reports and, despite their potentially misleading nature, would probably look at school "league tables" if available.

11. Summary and conclusions

In this chapter we bring together some of the key themes which have emerged from the survey findings discussed in detail in this report. We look first at what they tell us about New Zealand schools in 2006–07, and the differences between different kinds of school; then at the changes which have taken place since the previous survey was carried out in 2003, with particular reference to the introduction of the revised New Zealand curriculum.

11.1 The current picture in primary schools

In primary schools, as might be expected, the curriculum emphasis was very much on reading, writing, and mathematics, but at least half of the principals responding also identified assessment for learning, inquiry learning, and use of ICT as among their particular emphases. Only a quarter mentioned getting to grips with the new draft curriculum, and the new key competencies. However, in response to another question, one-third said that they had already implemented the key competencies, and just over a half were planning to do so. Further, a large majority had implemented, or were considering the introduction of, approaches such as inquiry learning, thinking skills, and problem solving, which relate to that aspect of the revised New Zealand curriculum framework. For primary teachers, integrating two or more curriculum areas was the top priority, and half thought that the revised curriculum would support them in doing this.

The main barriers to whole-school change were seen by principals as (lack of) time and money. For teachers, lack of time was by far the biggest barrier to curriculum change, followed by issues around class composition (too large, or too diverse).

Most schools already had, or were considering, a website and an intranet. In the classroom, ICT was used for a wide range of activities, most commonly creating printed documents, interactive games/skill development, and looking up websites or information sources suggested by the teacher. Nevertheless, teachers' reported views on the usefulness of ICT in learning indicated some doubts about its value, and perhaps a lack of awareness of its scope.

In assessing the quality of interactions related to professional learning, teachers' views were positive, but less so than those of principals, who may have overestimated the quality and extent of sharing (ideas, resources, lesson planning, etc.) that went on in their schools. (Principals also had a more positive view of student behaviour than teachers.) Good peer observation was reported by only a quarter of teachers. However, teachers did identify colleagues as their main (informal) source of useful ideas for their teaching programme.

Teachers generally had a high opinion of their principals' leadership skills, but less than half felt that he or she gave them useful advice on their teaching. On the whole, teachers rated their colleagues highly too, but some felt that they did not all pull their weight.

Differences between schools

On the whole, respondents' experiences and views did not differ in relation to the school characteristics we examined: size, location, and decile. There were some differences—none entirely surprising—between schools according to these three variables. There is a great deal of overlap between the former two variables, since rural schools are likely to be smaller than urban schools. In general:

- larger schools were more likely to have websites, school–business links, and concerns about class size; smaller schools were more likely to have concerns about money and the national curriculum requirements
- urban schools were more likely to have after-school programmes and cellphone management policies; rural schools were more likely to have school buses and concerns around the national curriculum requirements and parental expectations.

In addition, urban and larger schools were more likely to have, or be considering, restorative justice approaches. They were also more likely to use ICT (this was also true of younger teachers generally).

High-decile schools were more likely to have the key competencies as a main curriculum focus; to already have thinking skills, inquiry learning, and ICT integrated into the curriculum; to use ICT to communicate with people outside school; and to involve students in monitoring their own learning. They were more likely to be concerned about lack of time and parental expectations, while low-decile schools were more likely to be concerned about student behaviour and lack of leadership from the principal.

There was a stronger emphasis in low-decile schools on the family and community-based initiatives, reflecting the belief that closer alignment between school and beyond-school environments is a necessary prerequisite for effective learning. Thus they were more likely to:

- focus on engaging parents in their children's learning
- be involved in Healthy Schools initiatives
- have, or consider having, a social worker in the school (four out of five decile 1–2 schools, only one in six decile 9–10 schools)
- offer, or consider offering, ECE on the same site
- have, or consider having, a home–school partnership initiative (this was also true of small schools, rural schools, and integrated schools).

It is not surprising therefore that low-decile schools were on average involved in more wider-school initiatives than high-decile schools.

11.2 The current picture in secondary schools

According to principals in secondary schools, the main priorities for curriculum innovation were a literacy programme, a numeracy programme, the better integration of ICT, and transition/employment skills. As in the primary survey, there was strong support for thinking skills, inquiry learning, and problem solving. Education for Enterprise (not popular in primary schools) enjoyed three times as much support in secondary schools.

Secondary teachers gave a rather different picture. They were more likely to say that they had already implemented the strategies mentioned above, with the exception of Education for Enterprise, which less than a quarter of teachers said they had implemented or were considering. The approach most commonly planned (cited as "considering" rather than "already do") was achieving greater depth in fewer topics. However, a large majority of principals and teachers agreed that the key competencies had been introduced, or were under consideration.

As in primary schools, the biggest perceived barriers to whole-school change were (lack of) time and money. In terms of barriers to curriculum change, teachers again added class composition and (in this case) lack of teaching resources and the time taken for NCEA assessments.

Almost all secondary schools had websites, and most had intranets. ICT was widely used in the classroom, but the purposes changed somewhat as students grew older (there was more emphasis on independent research, and less on interactive games). On the whole, secondary teachers seemed slightly more doubtful about its value than their primary counterparts. Their assessment of school culture (sharing ideas, resources, etc.) was also less positive than that of primary teachers.

Most teachers were teaching in one curriculum area only, and this tended to be their area of expertise. Any teaching outside the specialist area was more likely to happen with younger students (Years 9 and 10 rather than Years 11–13).

Differences betweens schools and respondents

There were a few differences by type of school, and by age and gender of teacher. But on the whole, experiences and views did not seem to differ markedly in different types of school.

As in the primary sector, there was an emphasis in low-decile schools on the social context of the students. They were more likely than high-decile schools to have home–school partnerships, social workers in the school, ECE on site, AtoL contracts, and Education for Enterprise. They were more likely to have concerns around lack of money, lack of teaching resources, class diversity, and student behaviour, and to say that lack of suitable hardware impeded their use of ICT. (By contrast, teachers in high-decile schools were more likely to mention the high demand for computer labs.)

State schools were more likely to have a sports academy, and a focus on transition/employment skills, while state-integrated schools were more likely to share classes with other integrated schools, and to have home–school partnerships. According to principals, urban schools were more

likely than rural schools to share classes, and to have individual learning programmes for all students. (According to teachers, individual learning programmes were more common in rural schools.)

Younger teachers, and male teachers, were more confident in their use of ICT. As might be expected, there were also significant differences in usage according to teachers' specialist subject areas.

Female teachers appeared more willing to try out new ideas; they were more likely than male teachers to have implemented a range of curriculum initiatives. Younger teachers were less likely to have implemented curriculum changes, or to have even considered doing so.

11.3 Changes since 2003

Comparing the survey findings with those obtained in 2003, it is evident that there have been significant developments in the interim relating to the curriculum, assessment, and the use of ICT.

The influence of the revised New Zealand curriculum can be seen in a number of developments. The key competencies were not on the agenda in 2003, but according to principals (primary and secondary) they had by 2006/07 been introduced in more than a quarter of schools, and were being considered in a further half. (Teachers painted an even more optimistic picture.) There had also been an increase in attention to complex skills (thinking, problem solving) and self-awareness of learning (learning styles, multiple intelligences) which link to this aspect of the revised national curriculum framework. It is important to note, however, that the survey research does not reveal any detail of what innovations such as implementation of key competencies actually mean to each respondent.

By 2006, almost all secondary schools had a literacy programme in place, and more than three-quarters had a numeracy programme. Both figures represent a very large increase since 2003. Compared with 2003, twice the proportion of secondary teachers was aiming to reduce curriculum coverage to give more depth on fewer topics, and to add more contemporary examples/issues to their teaching.

The main barriers to curriculum change (lack of time and money; class diversity; lack of teaching resources) remained much the same, but the numbers of teachers citing them had increased since 2003. There was less concern about the national curriculum requirements, at least in primary schools, but more concern in both sectors about lack of staff commitment (although this still ranked low among the barriers).

The survey provided evidence of a considerable increase in the use of ICT in primary and secondary schools since 2003. In primary schools, the use for most purposes had increased substantially, or even doubled, but for gathering and analysing data it had decreased. In secondary

schools, there had been a similar large increase in all aspects of use except for independent research, because usage for that purpose was already very high in 2003.

Among primary teachers, there was an increasing emphasis on target setting and analysis of student achievement to guide teaching and learning, but with reference to other aspects of school culture there was hardly any change. By contrast, secondary teachers reported an improvement in the quality of sharing (ideas, resources, lessons) with colleagues, and in peer observation and feedback. This suggests a shift towards a climate of greater openness among teachers, confirmed by the fact that more teachers (in both primary and secondary sectors) cited colleagues as a source of useful teaching ideas.

In general, principals were against government-set national standards for student achievement (targets), while trustees were somewhat in favour. The level of opposition to national standards had remained constant since 2003, but the proportion in favour (rather than neutral) had increased. Among teachers, the picture was more varied. There was a substantial increase in the proportion of secondary teachers saying "yes", to the extent that those in favour slightly outnumbered those against. By contrast, the proportion of primary teachers saying "yes" had increased by only a small amount, and so had the proportion saying no; thus their views had not changed, but rather hardened over time. In all stakeholder groups, however, there remained a large number who answered not "yes" or "no", but rather "it depends".

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Appendix A: Profiles of secondary schools responding to the 2006 National Survey

Table 36 **Profile of responses by school size**

Size	MOE data (*n* = 315 schools) %	Principals (*n* = 194) %	Teachers (*n* = 818) %	Trustees (*n* = 278) %
<100	1	1	<1	1
100–249	7	6	3	7
250–399	14	13	6	15
400–749	31	33	24	33
750–1499	37	37	48	35
1500+	10	11	19	10

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

Whereas the principal and trustee samples closely reflect the overall characteristics of secondary schools (as shown in the MOE data), it is evident that the teacher sample is skewed towards larger schools. This reflects the much larger number of teachers employed in bigger schools—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. Because each school has one principal, and only two trustees per school were sampled, this sampling dilemma does not arise for those populations.

Table 37 **Profile of responses by decile**

Decile grouping	MOE data (*n* = 315 schools) %	Principals (*n* = 194) %	Teachers (*n* = 818) %	Trustees (*n* = 278) %
1–2 low	16	13	11	11
3–8 mid	66	69	67	70
9–10 high	18	18	21	19

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

The largest secondary schools tend to be high-decile schools and so this pattern of responses again reflects the over-representation of teachers in larger schools. The slight under-representation of low-decile schools, for all three responding groups, is likely to be associated with the smaller size of many of them.

Table 38 **Profile of responses by school area type**

School type	MOE data (*n* = 315 schools) %	Principals (*n* = 194) %	Teachers (*n* = 818) %	Trustees (*n* = 278) %
Main urban	63	61	71	58
Secondary urban	11	11	11	14
Minor urban	20	21	14	23
Rural	7	7	3	6

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

Note that secondary urban schools are in suburbs of cities and minor urban schools are in towns. Again, principal and trustee samples reflect the overall school population but the teacher sample is weighted towards the main urban areas, which tend to be where the largest schools are located.

Table 39 **Profile of responses by school authority**

Authority	MOE data (*n* = 315 schools) %	Principals (*n* = 194) %	Teachers (*n* = 818) %	Trustees (*n* = 278) %
State	78	80	87	78
State-integrated	22	20	12	22

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

As for the other characteristics, the teacher sample is somewhat skewed, with teachers in state-integrated schools under-represented. The largest schools are state schools, so this is to be expected in view of the sampling dilemma outlined above.

Principals who responded

The overall response rate for principals was 62 percent,[12] from 194 of a possible 315 secondary schools. As in 2003, more males (72 percent) than females responded, reflecting gender differences in this role. Most of these principals (90 percent) identified as Pākehā/European, and 6 percent were Māori.

Seventeen percent of respondents had become principals in the last two years. A further 23 percent had served between three and five years, 28 percent between six and 10 years, 18 percent between 11 and 15 years, and 12 percent over 15 years. Compared to 2003, the 2006 sample has more experienced principals.

[12] This compares favourably with the 48 percent response rate from the smaller overall sample of 200 schools in 2003.

Teachers who responded

Of the 2061 teacher surveys distributed, 40 percent were returned in a sufficiently completed state to be included. Sixty-two percent of the respondents were female, which is almost identical to the response profile in 2003 and is representative of the gender composition of teachers. Eighty-nine percent of the respondents identified as Pākehā/European, 5 percent identified as Māori, 3 percent as Asian, and 2 percent as Pasifika or as "New Zealander" respectively.

Sixty-six percent of the responding teachers had some management responsibility. Five percent were senior managers, 38 percent were middle managers (e.g., curriculum or faculty leaders), 15 percent held the newly established role of specialist classroom teacher, and 8 percent were deans.

Eight percent of respondents had become teachers in the last two years. A further 14 percent had served between three and five years, 13 percent between six and 10 years, 10 percent between 11 and 15 years, and 54 percent over 15 years. Compared to the principals, more of the responding teachers were in younger age groups.

Table 40 **A comparison of responding teacher and principal age groups**

Age of respondents	Principals (*n* = 194) %	Teachers (*n* = 818) %
<30 years		11
30–39	2	19
40–49	22	27
50–59	69	36
60+	7	6

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

Trustees

Forty-four percent of a potential pool of 630 trustees responded. Just one trustee responded from 76 schools, with two responding, as requested, from a further 101 schools. The intention to have a balance between chairpersons (51 percent) and other trustees was achieved.

Responding trustees tended to be relatively experienced in the role. The mean length of time as a trustee was four years. Just 11 percent had been a trustee for less than one year and 36 percent had served in this role for more than five years. The most common reason for wanting to be a trustee was to "contribute to the community" (84 percent).

The sample was gender balanced (47 percent female, 53 percent male). Just 6 percent of respondents were aged under 40, with nearly half (42 percent) 50 or over.

Parents

Parents from 27 schools were surveyed, producing an identical response rate (47 percent) to that of 2003. Ninety-five percent of parents currently had one or two children at the school, with 71 percent reporting having had a child at the school for two to six years. Twenty-one percent of respondents indicated they were employed in the education sector.

More females (82 percent) than males (18 percent) responded. Seventy-seven percent of the respondents identified as Pākehā/European, 12 percent identified as Māori, 8 percent as "New Zealander", 5 percent as Pasifika, and 2 percent as Asian.

Appendix B: Profiles of primary schools responding to the 2007 National Survey

Table 41 **Profile of responses by school size**

Size	MOE data (*n* = 351 schools) %	Principals (*n* = 196) %	Teachers (*n* = 912) %	Trustees (*n* = 329) %
Up to 100	25	20	5	25
101–300	45	44	38	44
300+	30	35	57	30

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

The trustee sample closely reflects the overall characteristics of primary schools (as shown in the MOE data), the principal sample is slightly skewed towards larger schools, and the teacher sample strongly so. This reflects the much larger number of teachers employed in bigger schools—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. Because each school has one principal, and only two trustees per school were sampled, this sampling dilemma does not arise for those populations.

Table 42 **Profile of responses by decile**

Decile grouping	MOE data (*n* = 351 schools) %	Principals (*n* = 196) %	Teachers (*n* = 912) %	Trustees (*n* = 329) %
1–2 low	19	16	15	13
3–8 mid	60	57	57	60
9–10 high	21	27	28	27

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

Principals, teachers, and trustees in high-decile schools were rather more likely to respond to the survey than those in other schools.

Table 43 **Profile of responses by school area type**

School type	MOE data (*n* = 351 schools) %	Principals (*n* = 196) %	Teachers (*n* = 912) %	Trustees (*n* = 329) %
Urban	73	73	89	70
Rural	27	27	11	30

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

The achieved sample of principals matches the MOE data on this criterion, and the trustee sample is close. The teacher sample, however, is heavily skewed towards urban schools, since they have much larger teacher populations.

Table 44 **Profile of responses by school authority**

Authority	MOE data (*n* = 351 schools) %	Principals (*n* = 196) %	Teachers (*n* = 912) %	Trustees (*n* = 329) %
State	85	88	89	88
State-integrated	15	12	11	12

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

Principals and trustees from state-integrated schools were less likely to respond than those from other state schools. Teachers from state-integrated schools were also under-represented, but this could be due to the fact that the largest schools are state schools.

Table 45 **Profile of responses by school type**

School type	MOE data (*n* = 351 schools) %	Principals (*n* = 196) %	Teachers (*n* = 912) %	Trustees (*n* = 329) %
Contributing	43	44	46	43
Full primary	50	45	40	48
Intermediate	7	11	14	8

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

Principals from intermediate schools were more likely to respond, and principals from full primary schools less so. Teachers from intermediate schools were over-represented in the sample, as intermediate schools are on average larger than contributing or full primary schools.

Principals who responded

The overall response rate for principals was 56 percent. More males (62 percent) than females (37 percent) responded, reflecting gender differences in this role. Most of these principals (93 percent) identified as Pākehā/European, 7 percent were Māori, and 1 percent Pasifika.

Thirteen percent of respondents had become principals in the last two years. A further 12 percent had served between three and five years, 19 percent between six and 10 years, 18 percent between 11 and 15 years, and 36 percent over 15 years.

Teachers who responded

A total of 1901 teacher questionnaires were distributed and the response rate was 48 percent. Eighty-eight percent of the respondents were female (a strong contrast with the gender balance of principals). Eighty-eight percent of the respondents identified as Pākehā/European, 8 percent as Māori, 3 percent as Pasifika or "New Zealander", and 1 percent as Asian.

Fifty-eight percent of the responding teachers held positions of responsibility. Nine percent were deputy principals, 6 percent were assistant principals, 30 percent were curriculum/syndicate leaders, and 15 percent were senior or tutor teachers.

Eight percent of respondents were relatively new to teaching (less than two years). A further 17 percent had served between two and five years, 21 percent between six and 10 years, 12 percent between 11 and 15 years, and 42 percent more than 15 years.

Compared to the principals, more of the responding teachers were in younger age groups, as would be expected.

Table 46 **A comparison of responding teacher and principal age groups**

Age of respondents	Principals (*n* = 196) %	Teachers (*n* = 912) %
<30 years	9 < 40	17
30–39		23
40–49	25	26
50–59	56	29
60+	10	4

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

Trustees

Forty-seven percent of a potential 702 trustees returned completed questionnaires. Just 1 percent had been a trustee for less than one year and 9 percent had served in this role for more than five years. The most common reason for wanting to be a trustee was to "contribute to the community" (81 percent).

The sample was gender balanced (53 percent female, 45 percent male). Twenty-eight percent of respondents were aged under 40, 56 percent aged between 40 and 49, and 14 percent were 50 or over.

Parents

Questionnaires were distributed to 1615 parents and 47 percent responded. Ninety percent of parents currently had one or two children at the school with 66 percent reporting having had a child at the school for two to six years. Sixteen percent of respondents indicated they were employed in the education sector.

More females (81 percent) than males (18 percent) responded. Seventy-five percent of the respondents identified as Pākehā/European, 16 percent as Māori, 7 percent as Pasifika, 4 percent as Asian, and 2 percent as "New Zealander".