Opportunities for Teacher Collaborative Practices in a Self-Managed School System: the New Zealand Experience

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Abstract

Professional collaboration within schools, supporting ongoing adult learning, is one of the most promising ways to improve student performance. This paper charts teacher experiences of a range of collaborative activities in New Zealand schools. Although these schools enjoy considerable flexibility that should support such collaboration, national survey data shows that it varies widely and is not widespread at the high school level. The paper considers reasons for this, including the role of school characteristics, such as the greater complexity of high schools compared with elementary schools, the support given to schools, and other factors that contribute to differences in teacher experiences. Implications for policy that could better underpin in-school professional collaboration are discussed.

Introduction

Political expectations that schools can raise student achievement levels are now more intense in many countries, at the same time as public spending on schools is static, or declining. It is therefore timely to focus on ways in which schools can better harness their internal strengths. Teacher collaboration offers one of the prime ways to make teachers' practice more effective (e.g., McLaughlin and Talbert 2001, Supovitz, Sirinides and May 2010). Such collaboration is also essential if schools are to be able to offer the more complex learning that is called for in a fast changing world. The ability to work well collectively, to create knowledge as well as apply it, is also increasingly valued in employment, and is thus an important aspect of student development, something that teachers need to understand and do themselves in order to develop it in their students.

Increased use of collaborative processes in schools, however, challenges the traditional location of teacher professionalism in responsibility for a single class, particular students, or a particular curriculum subject (Little 1990). It also needs supportive framing both within individual schools, and in the policy settings that affect school life.

This paper focuses on the extent to which everyday collaborative processes that are likely to deepen teacher learning and allow collective work on the goal of deepening and improving student learning actually occur in schools currently. New Zealand provides a particularly useful situation to explore policy related aspects that might encourage such collaboration, because schools have been self-managing since 1989, and have been given considerable latitude in curriculum and personnel decisions. They have not been left entirely to their own devices; indeed, after a first decade of rapid curriculum change at the national level, within a laissez-faire school support and accountability environment, the second decade of self-managing schools has seen much more attention paid to policy that provides more support and frameworks, e.g., mandatory cycles of annual school planning and reporting that emphasise self-review, some government-supported professional development programmes, that have included a focus on teachers working together, new suites of assessment

tools that provide more timely formative information, and new frameworks and programmes for school leadership development (Wylie 2010). The curriculum was reviewed, in a careful process that involved educators. The result was a forward-thinking framework, focused on the development of lifelong learners, and addressing the growth of social, emotional, and metacognitive capabilities as well as content areas (Hipkins 2011). However, the principle of school self-management remains central, and the system as a whole lacks the skein of shared responsibility and ongoing development of capability and useful resources that exists in some other self-managed schools systems (Wylie 2007), and in systems deliberately organised to have shared responsibility between government, districts, and individual schools that have shown systemic gains in performance (Fullan 2010, Hannay, Wideman and Seller 2006, Levin 2009).

I start with an outline of the policy environment in relation to encouragement of collaborative school cultures. Next I describe the levels of collaboration reported by teachers in the New Zealand Council for Educational Research (NZCER) 2009 secondary (high) school and 2010 primary (elementary) school national surveys. These comprehensive surveys of what is happening in schools, and the impact of policy, are undertaken every three years with principals, teachers, school trustees, and parents. Some items have remained common over the years, with changes made to reflect new knowledge from research and syntheses of research, and new policy. In recent years we have had a much closer focus on ways in which teachers work together, and what they have gained from professional development. The 2009 and 2010 surveys also provide information on the introduction of the New Zealand Curriculum.[i]

Teacher surveys were randomly distributed at each school, with responses ranging from 1 to 14 at each school, so the surveys give us a picture of teacher views, rather than an aggregate school picture. Teachers at 204 of the country's 316 state secondary schools took part in 2009, with the 870 surveys returned providing good representation of the distribution of teachers in relation to school characteristics. In 2010, 970 primary teachers took part, from a random sample of 350 schools.

The paper then explores school aspects and professional development and other experiences that are related to differences in levels of teacher collaboration. Finally, I return to the aspects of policy that appear to have a particular bearing on the encouragement of collaboration within schools[ii].

Policy influences on collaborative practices
On the face of it, New Zealand's 2,540 state schools have had considerable latitude since school self-management was introduced in 1989, to decide how best to organise teaching and learning, and to build cohesive school cultures. There are a range of policies that are likely to have a bearing on the occurrence of collaborative practices in schools.

- The education system is actually a network of self-managed schools, each governed by a parent-elected board of trustees, which employs the principal. New Zealand school boards are legally responsible for operating within the broad regulatory frameworks of the New Zealand Curriculum and National Educational Guidelines, and it is up to each school to decide how to do this. Schools run their own budgets, using government funding and staffing numbers allocated by roll numbers largely on a per-capita basis, with additional funding given to schools serving low-income communities; they also raise money through

voluntary school fees and their community, and up until recently, have competed for government programmes that offer additional funding. Each school makes its own staff appointments within national guidelines on appointments, and with respect to collective employment contracts. Schools can also decide what mix of school leadership positions they will have, and how to allocate teacher time. However, the early national surveys showed a decline by the end of the first decade of school self-management in the proportion of teachers who had some non-contact time in the class day: little seemed to have changed in perceptions that learning would gain from teachers being able to work together. Or school leaders were seeing themselves constrained by funding. It was only when teachers won an entitlement to classroom release time in their collective contracts and these contracts allowed for the allocation of management units for additional school-level responsibilities that the time allocation improved, although secondary principals continue to voice difficulties with funding the classroom release time. Over half the teachers taking part in the 2009 and 2010 national surveys used in this paper had school responsibilities beyond their own classroom that involved them leading or facilitating work with their colleagues, with somewhat higher proportions in primary than secondary schools. The proportion of primary teachers who said they had enough time to work together to plan and discuss their work doubled between 2007 (28 percent) and 2010 (61 percent).

- Professional development is also decided at the school level, as part of school annual planning. This usually means there are school priority areas, and a greater likelihood that teachers will participate in professional development together. It would be rare for a teacher not to take part in some professional development each year, but there is no individual entitlement to a certain number of hours. School leaders usually support individual requests for funding and time to take part in professional development where they see an alignment with school priorities. Increasingly over the past few years more professional development has been offered on a whole-school basis, with government-funded programmes playing a key part.

- The forward-looking New Zealand Curriculum was introduced in 2009, but circulated in draft form for some years beforehand, allowing schools to work with it and contribute to its final development. Because its particular form is school decided, internal discussions of school values, goals, and emphases are needed, with greater attention paid to how the specific plans for particular year levels and courses articulate with each other. The New Zealand Curriculum provides a mandatory levelled framework, with schools expected to develop within this their own curriculum to best suit their particular students.

- Annual planning and reporting cycles have been in place since 2003. While there was some initial suspicion that the new mandate was a form of 'recentralisation', by 2009 and 2010, close to 90 percent of the primary and secondary principals in NZCER national surveys were agreeing that they would use something like this cycle if they were not required to use it. Schools must report annually on student achievement, amongst other aspects of school performance, but they set their own goals and targets, and choose which assessments to use for both formative and, at primary school level, reporting purposes. While assessment results matter, they have not been as high stakes in New Zealand as in other systems.

Schools are externally reviewed every three years by the Education Review Office (ERO). Around 16 percent of schools each year have been judged in need of a more frequent review because of some concern with the school, with the figure rising to 20 percent in 2010 as ERO pays increasingly close attention to whether schools have adequate student achievement data and processes to use that data to improve student outcomes. ERO and Ministry of Education advice to schools has increasingly emphasised self-review and evaluation, using inquiry processes, starting with evidence-gathering.

- In recent years, several new policy levers with an assessment focus that should encourage teacher collaboration have also been added. Extensive literacy and numeracy professional development (voluntary, and offered free or low cost) emphasised what could be learnt within schools by teachers discussing student work together. A new system of criterion-referenced high school qualifications (the National Certificate of Educational Achievement, NCEA) began in 2002. This includes some internally assessed standards, and to be accredited to undertake internal assessment, schools need to have some moderation processes in place. This new qualifications system increased teacher workloads, but generally teachers and principals have been positive about it. Qualifications continue to play a key role in shaping secondary curriculum and ways of organising secondary schools. A new generation of formative assessments has also been a focus of much professional development in primary schools, spurring greater interest in the opportunities for professional discussion that are afforded by the timely information from these assessments. More controversially, in 2010 primary schools were required to report individual student achievement in reading, writing, and mathematics, against a set of new national standards, based on overall teacher judgements from a range of evidence (including, but not limited to, standardised tests). Moderation of these judgements across teachers within a school has been described as an essential part of the whole process.

Thus, there are a number of policy frameworks that show an increasing convergence with respect to the importance of school collective professional learning and decision-making processes, and which have provided a varied array of frameworks, tools and experiences to support schools to realise these processes themselves. But it is up to individual schools and their leaders to do so.

Teacher Collaboration in New Zealand schools

Little (1990) described four forms of teacher collegiality. Three of these she classified as "weak", since they would not change the status quo, compared with the fourth form of teacher professional collegiality, "joint work", which "is a process of co-participation that entails reflective inquiry, criticism, and learning as integral constituents, as opposed to acquiring or exchanging and accepting ideas, ready-made materials or tricks without inquiry or criticism" (quoted in Fallon and Barnett, 2009, p.5).

The survey questions we asked in the national surveys, particularly in the 2010 primary survey, provide some insight into the kinds of teacher collegiality experienced in New Zealand schools, though we did not ask specifically about the depth of teacher discussion, or the forms it took. Exploratory factor analysis of New Zealand teacher responses to a set of items asking them to

"describe the quality of these aspects of school culture", using a 5-point Likert scale, ranging from "very good/generally happens" to "very poor/non-existent") identified three factors, with alphas (internal consistency) of 0.90 for the primary teachers, and between 0.84 and 0.90 for the high school teachers.

These three factors are not identical to the four forms of collegiality that Little described in 1990, but they do show the same trends in the kind of collegiality experienced. Levels were highest for co-operative relations, informal activities that can run alongside individualised approaches to teaching.

Teacher co-operation

Figure 1 shows that most New Zealand teachers share with each other knowledge, resources, ideas, and to a lesser extent, lessons and planning. Primary teachers are more likely to describe this sharing as very good or generally happening, particularly in relation to sharing teaching ideas and knowledge about individual students, and sharing lessons and planning.

Figure 1   Teacher Co-operation
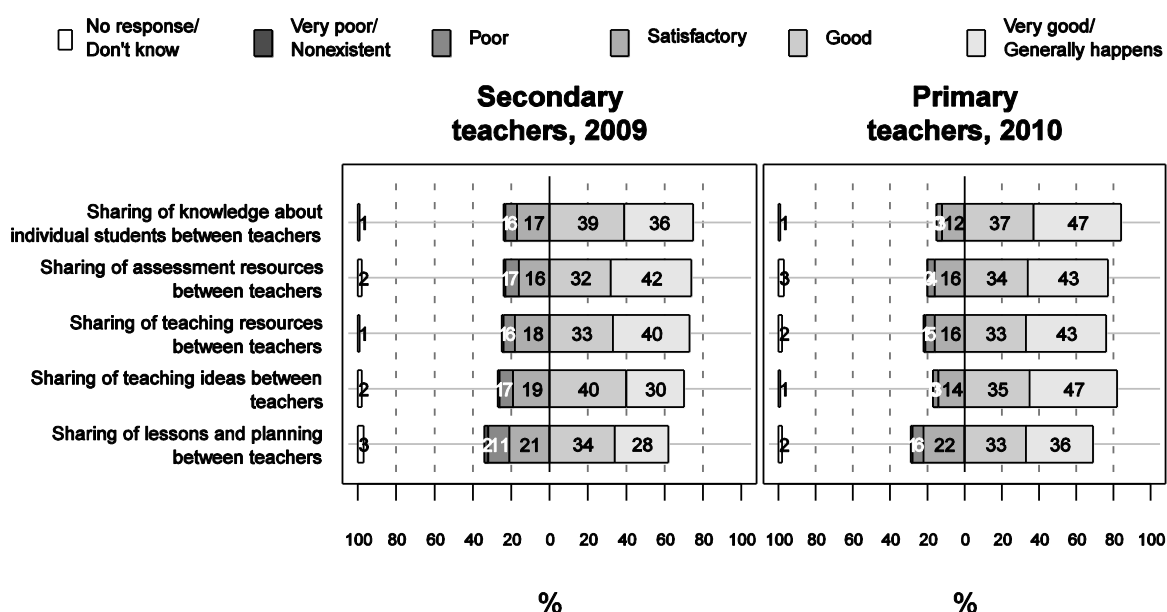
Such sharing is the traditional form of collegiality – it may be piecemeal and ad hoc, or may not include discussion about the effectiveness of resources, ideas, and assessment materials, based on evidence about student learning, or about ways to make best use of the shared materials.

Teacher support

Figure 2 shows a much greater difference between primary and secondary teachers in terms of the support available to them if they encounter a problem – or if they want to take risks and be innovative in their teaching. It is interesting that the factor analysis grouped support with risk-taking; perhaps this points to a a school culture that supports willingness to be open about one's practice. Consistent school-wide messages about behaviour were also twice as likely to occur for primary teachers than for secondary teachers. Overall, between 40 to 49 percent of primary teachers

thought they generally experienced such support, and were in schools which had consistent messages and approaches, but only 16-23 percent of secondary teachers thought this.

Figure 2   Teacher Support
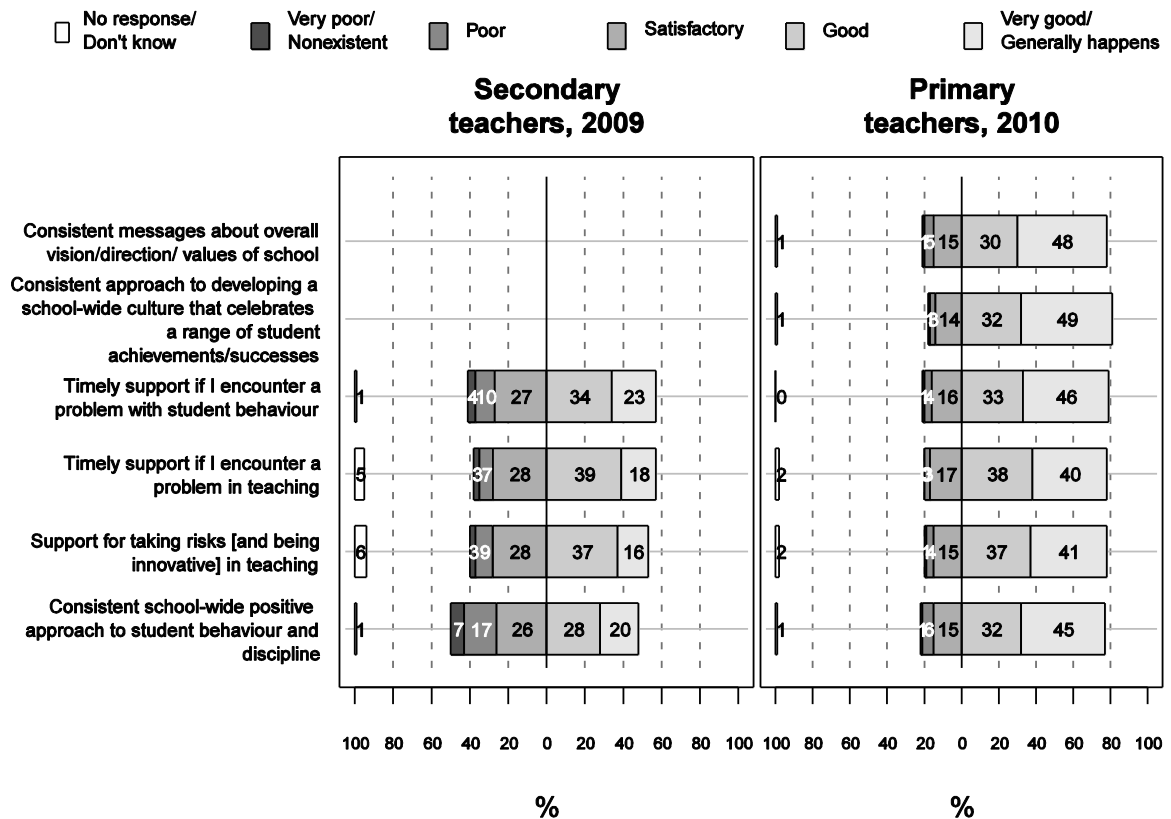
Achievement- focused sharing

Figure 3 shows that primary teachers also reported much more experience of discussion of achievement results in relation to improving student performance than did secondary teachers. This factor included the development of leadership skills among teachers, perhaps pointing to the skills that teachers need to undertake such discussions, as well as the understanding of assessment results.

Figure 3   Achievement-focused Sharing

| | No response/ Don't know | Very poor/ Nonexistent | Poor | Satisfactory | Good | Very good/ Generally happens |

Secondary teachers, 2009   **Primary teachers, 2010**

Sharing of ideas among teachers for how to help students improve their performance

Analysis of student achievement to guide teaching and learning

Setting useful targets for student achievement

Discussion of assessment results with other teachers to help students improve their performance

Developing leadership skills among teachers

100 80 60 40 20 0 20 40 60 80 100   100 80 60 40 20 0 20 40 60 80 100

%   %

In-school learning-focused school processes

A bank of items in both national surveys focused on processes related to the way schools are organised and teachers are managed. This was to find out more about the extent to which everyday school processes occurred which were consistent with some of the themes identified in studies of school and teacher development as effective, and associated with gains for student learning. It was also to find out whether nationally mandated management processes, such as annual teacher appraisal (performance review) provided opportunities for professional development. Teachers were asked to indicate "how much you agree with the following statements about your school processes", and given a 5-point Likert scale (ranging from strongly agree to strongly disagree).
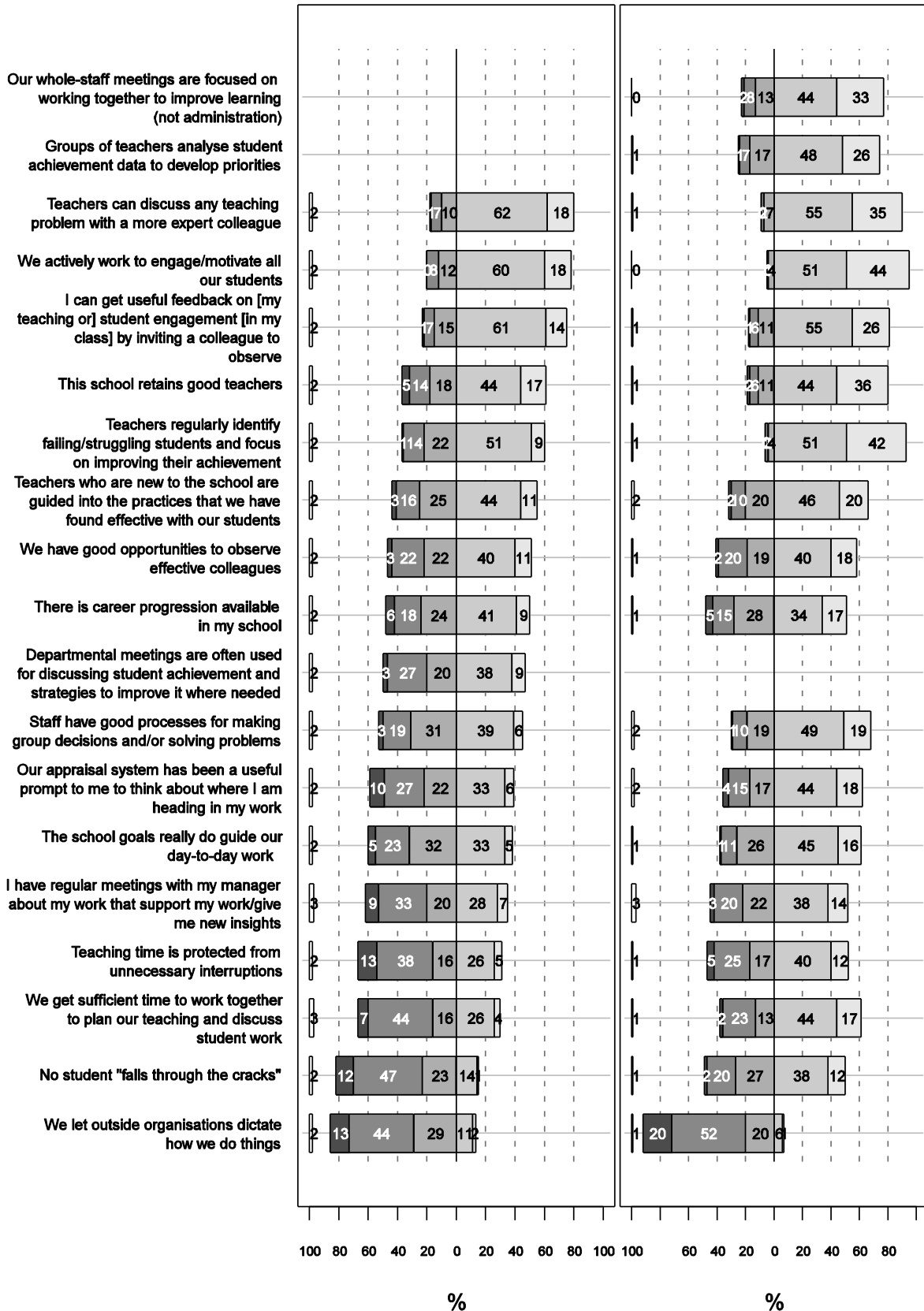
Figure 4 shows lower levels of strong agreement that these processes occurred in the teacher's school than with the items related to teacher collaboration. Primary teachers were much more likely to strongly agree with these items than their secondary peers.

Figure 4   In-school processes indicating learning-focused school processes

Legend: □ No response ■ Strongly disagree ■ Disagree ■ Neutral/ Not sure □ Agree □ Strongly agree

Secondary teachers, 2009

Primary teachers, 2010

Our whole-staff meetings are focused on working together to improve learning (not administration)
- Secondary: —
- Primary: 0 | 28 13 44 33

Groups of teachers analyse student achievement data to develop priorities
- Secondary: —
- Primary: 1 | 17 17 48 26

Teachers can discuss any teaching problem with a more expert colleague
- Secondary: 2 | 17 10 62 18
- Primary: 1 | 2 7 55 35

We actively work to engage/motivate all our students
- Secondary: 2 | 08 12 60 18
- Primary: 0 | 4 51 44

I can get useful feedback on [my teaching or] student engagement [in my class] by inviting a colleague to observe
- Secondary: 2 | 17 15 61 14
- Primary: 1 | 16 11 55 26

This school retains good teachers
- Secondary: 2 | 5 14 18 44 17
- Primary: 1 | 26 11 44 36

Teachers regularly identify failing/struggling students and focus on improving their achievement
- Secondary: 2 | 1 14 22 51 9
- Primary: 1 | 4 51 42

Teachers who are new to the school are guided into the practices that we have found effective with our students
- Secondary: 2 | 3 16 25 44 11
- Primary: 2 | 2 10 20 46 20

We have good opportunities to observe effective colleagues
- Secondary: 2 | 3 22 22 40 11
- Primary: 1 | 2 20 19 40 18

There is career progression available in my school
- Secondary: 2 | 6 18 24 41 9
- Primary: 1 | 5 15 28 34 17

Departmental meetings are often used for discussing student achievement and strategies to improve it where needed
- Secondary: 2 | 3 27 20 38 9
- Primary: —

Staff have good processes for making group decisions and/or solving problems
- Secondary: 2 | 3 19 31 39 6
- Primary: 2 | 10 19 49 19

Our appraisal system has been a useful prompt to me to think about where I am heading in my work
- Secondary: 2 | 10 27 22 33 6
- Primary: 2 | 4 15 17 44 18

The school goals really do guide our day-to-day work
- Secondary: 2 | 5 23 32 33 5
- Primary: 1 | 11 26 45 16

I have regular meetings with my manager about my work that support my work/give me new insights
- Secondary: 3 | 9 33 20 28 7
- Primary: 3 | 3 20 22 38 14

Teaching time is protected from unnecessary interruptions
- Secondary: 2 | 13 38 16 26 5
- Primary: 1 | 5 25 17 40 12

We get sufficient time to work together to plan our teaching and discuss student work
- Secondary: 3 | 7 44 16 26 4
- Primary: 1 | 2 23 13 44 17

No student "falls through the cracks"
- Secondary: 2 | 12 47 23 14
- Primary: 1 | 2 20 27 38 12

We let outside organisations dictate how we do things
- Secondary: 2 | 13 44 29 11 2
- Primary: 1 | 20 52 20 6

Secondary axis (%): 100 80 60 40 20 0 20 40 60 80 100

Primary axis (%): 100 60 40 20 0 20 40 60 80

%

%

Informal self-initiated occasions to get advice and support are more common for New Zealand teachers than are systemically created opportunities that show evidence of a community of practice focused on learning. Figure 4 shows that most teachers responding thought they could discuss any teaching problem with a more expert colleague, or that they could get useful feedback on student engagement in their class by inviting a colleague to observe the class. But just over half thought that opportunities existed to observe effective colleagues. Around half the primary teachers, and fewer secondary teachers, thought they gained useful learning from their appraisals or regular meetings with their manager. These school management processes, such as appraisal, which is nationally mandated, may be treated as formalities, rather than as opportunities for substantive professional discussions. School goals also did not generally guide the majority of teachers' day-to-day work, nor was teaching time generally protected from interruptions the teacher thought unnecessary. Looking at this set of school processes as a whole also suggest that principals and teachers may be underestimating how much a school's teachers can learn from each other, and from working together, and therefore that they are not capitalising as much as they could on their own internal expertise.

Overall levels of teacher collaboration and coherent school processes

Tables 1 and 2 summarise the overall levels of teacher experiences of the three forms of professional collaboration, and the in-school learning-focused processes. Almost half the primary teachers perceive very good levels of *teacher co-operation* and *teacher support*, and 43 percent, very good levels of *achievement-focused sharing* to be occurring in their school. Contrast that with the secondary teachers, of whom only 39 percent perceived very good levels of *teacher co-operation*, 18 percent very good levels of *teacher support*, and only 12 percent, *achievement-focused sharing,* occurring in their school. Primary and secondary teachers were more alike in their perceptions of learning-focused school processes.

Table 1 **Primary teachers' views of professional collegiality and learning-focused school processes**

(N=960)	Teacher co-operation %	Teacher support %	Achievement-focused sharing %	Learning-focused school processes
Very good/generally happens	48	50	43	22
Good	21	16	23	18
Satisfactory	19	25	23	33
Poor	8	5	8	17
Very poor/non-existent	3	3	2	9

NB: Numbers do not add to 100 because of rounding, and a few who did not answer these questions

Table 2 **Secondary teachers' views of professional collegiality and learning-focused school processes**

(N=870)	Teacher co-operation %	Teacher support %	Achievement-focused sharing %	Learning-focused school processes
Very good/generally happens	39	18	12	15
Good	22	21	16	35
Satisfactory	22	28	36	27
Poor	10	16	22	13
Very poor/non-existent	6	15	13	9

NB: Numbers do not add to 100 because of rounding, and a few who did not answer these questions

How likely is it that those who report high levels of teacher support or achievement-focused sharing in their school also report high levels of coherent learning-focused school processes? Correlations between the factors were quite strong. They are lowest in relation to the traditional form of collegial relations, teacher co-operation. In other words, teacher co-operation cannot be relied on to provide the kind of adult learning that is needed for secondary schools to meet the more complex demands placed upon them. This makes sense: teacher co-operation is manifest in informal participation and activities that do not rely on common projects, on the things that would bring people with different strengths and interests together in ways that can efficiently serve several different purposes at once. Such shared work can give a sense of the collective as something positive and worthwhile, as well as contributing to individual knowledge.

The correlations in the next two tables indicate that where attention has been paid to, say, discussions with colleagues that are focused on the school's own students and examine evidence of their performance, it is more likely that the mandatory management framework of teacher appraisals will also focus on what teachers have achieved with their students, and that teachers' managers will use that responsibility in a meaningful rather than superficial way, to support and further develop their staff. Teachers who gave high ratings to these aspects of a collective school culture also tended to report high morale levels, indicating that they experience gains from the movement away from the more traditional laissez faire approach.

Table 3 **Primary teachers - correlations between collegiality aspects, learning-focused school processes and school leadership**

	Teacher co-operation	Teacher support	Achievement-focused sharing	School principal[iii]
Learning-focused school processes	0.60	0.72	0.74	0.64
Teacher co-operation		0.68	0.72	
Teacher support			0.77	
School principal	0.42	0.65	0.55	

Table 4 **Secondary teachers - correlations between collegiality aspects, coherent learning-focused processes and school leadership**

	Teacher co-operation	Teacher support	Achievement-focused sharing	School principal
Learning-focused school processes	0.51	0.68	0.72	0.60
Teacher co-operation		0.51	0.60	
Teacher support			0.64	
School principal	0.30	0.59	0.51	

Other experiences and views related to teacher collegiality and learning-focused school processes

The NZCER national surveys are comprehensive, and therefore provide information about teachers' views of their school culture and ways of working with others in relation to not only their own sense of what they have achieved in their work over the last few years, their career plans, but also their experiences of professional development, how their school has approached the introduction of the revised New Zealand Curriculum, and the issues they see confronting their school. Teacher views can also be analysed in relation to the characteristics of the school (the socioeconomic community served by the school, size, and location). Below I summarise some trends, with a particular focus on differences between primary and secondary teachers.

Professional learning

New Zealand schools provide a range of professional development opportunities. Some of these opportunities are national programmes, which schools opt into, and which come either free, or with some costs subsidised. These programmes have often been rationed, and made available first to priority areas, usually schools serving low socio-economic areas. Schools were also encouraged to form voluntary clusters, and bid for funding for a limited period (often several years), to carry out joint projects, particularly around the use of ICT, or in the last few years, the implementation of the New Zealand Curriculum.

Primary teachers appeared to have somewhat wider professional development opportunities than their secondary peers. Around three-quarters had taken part not just in numeracy (a national programme), reading, and writing professional development between 2008-10, but also in professional development focused on student inquiry (widely perceived to be encouraged by the New Zealand Curriculum). Around half had participated in an inquiry or learning group of teachers at their own school, and in professional development focused on student engagement (a policy emphasis for some years, though with an emphasis on attendance), and learning conversations, where teachers learn to discuss with each other and school leaders, patterns of student achievement over time in relation to the strategies they have used with individual students.

The national survey data on the kinds of professional development undertaken do not tell us to what extent each kind emphasised teachers working together. The kinds of professional development that teachers said changed their thinking or improved their practice certainly included some national-level programmes and approaches which are known to include joint teacher work, to have shown teachers the value and enjoyment to be gained from such work, and improved teacher capability to work together. One of the national policy goals is to improve the achievement of indigenous students, Maori, who comprise around 22 percent of the student population. A research-based approach, Te Kotahitanga (Bishop, Berryman, Powell & Teddy 2007), has been used in around ten percent of the secondary schools. This approach is school-wide, and includes teachers working together, learning how to observe each other's practice using systematic tools, so that teachers can see for themselves any gaps between their intended practice, and what students experience. It is interesting that teachers who took part in this structured and well-supported professional development were much more likely to say they had changed their thinking or improved their practice, than their primary peers who had undertaken some professional development related to improving Maori student achievement. There has been as yet no similar systematic approach developed for use in primary schools.

We asked teachers the extent to which a range of opportunities for learning occurred for them. Primary and secondary teachers views about their professional development were much the same, but primary teachers were somewhat more positive about:

- Ability to put new ideas into practice

- Encouragement and support for experimentation with new ideas

- Opportunities to explore ideas and theory underpinning new approaches

- Opportunities to learn from other teachers' practice in their school

- Opportunities to find out about interesting work in other schools

- School leaders modelling inspiring professional learning

- Professional activities outside the school stimulating growth

- Useful blocks of time for professional learning

- Having professional learning focused on their teaching level/learning area.

Some examples of how often this occurred illustrate the differences: 62 percent of primary and 51 percent of secondary teachers thought they had good opportunities to see and discuss the work of other teachers in their own school when they wanted to do things differently. Thirty-four percent of primary, and 27 percent of secondary teachers said that they had good opportunities to see and discuss the work of teachers in other schools whose work interested them. Useful blocks of time for professional learning occurred for 60 percent of the primary teachers, and for 52 percent of the secondary teachers.

The higher the level of teacher collaboration and learning-centred school processes reported, the more likely it was that teachers reported good opportunities for learning. [iv]This underlines the importance of coherence in schools if teachers are to make the most of professional development, and the limits on individual change if the school's own practices are not supportive – e.g., if there are no opportunities to put new ideas into practice.

Giving effect to the New Zealand Curriculum

Analysis of the primary national survey data showed a clear linkage between whole-staff exploration of eight key aspects of the New Zealand Curriculum and levels of teacher collaboration and school learning processes. Teachers who reported high levels of collaboration and school learning processes were much more likely to report actions already taken at their school to put the New Zealand Curriculum in place, particularly around its innovations, such as the key competencies, giving students a voice in curriculum planning and decisions about learning, developing self-managing learners, the use of authentic or local learning contexts. They were also much more likely to report collaborative work, such as having teams exploring particular aspects, working on shared pedagogies, and working on having coherence across the school. Views of how important it was to do so were much the same whatever the level of teacher collaboration – it was putting those views into practice that was associated with higher levels of teacher collaboration and school learning-focused processes.

Fine-grained study over time of 'early adopter' schools, who were eager to give life to the New Zealand Curriculum, show that these schools were already working reflectively and collaboratively: that schools with higher levels of teacher collaboration and school learning processes were in a better position to engage with what is a complex framework (Cowie, Hipkins, Keown & Boyd forthcoming). This study of the early adopter schools also shows that the process of engagement – if it results in action – can enhance collaboration and school learning processes – among other gains. However, these processes need continued attention and development, particularly where the impetus for change in teaching rubs up against the national qualifications framing in secondary schools, and the national standards for reading, writing, and mathematics in primary schools. The study concludes that further progress in these schools, which can be thought of as the vanguard, would need more collective approaches across the system as a whole, including the use of networks bringing experts and teachers together, to create innovative resources for teachers to "think with" in their particular schools.

Issues confronting their school

Secondary teachers were much more likely than their primary peers to identify the major issues confronting their school (from a set of 25 items). They were much more conscious of issues to do with student motivation, student behaviour[v], and achievement levels. Giving effect to the New Zealand Curriculum loomed far larger for secondary teachers (46 percent cf. 13 percent of primary teachers identified this as a major issue for their school). This difference is unlikely to be solely due to the secondary survey taking place a year earlier than the primary survey. Teaching quality, the principal's leadership, and recruitment of teaching staff also concerned more secondary than primary teachers. Against these differences, which were also evident in the previous round of the NZCER national survey (2006-07), it is interesting to see that the two schooling levels had similar proportions identifying issues for their school around assessment workload, getting good quality professional development, and sensing that assessment was driving their curriculum. Assessment workload loomed larger for teachers as an issue for their school than whether it was driving the curriculum, or getting good professional development. Assessment evidence so often figures in

accounts of collaborative teacher work aimed at improving student achievement, so this identification of assessment workload as a prime major issue in survey responses suggests the need to look carefully at what assessments are carried out and how they are used in schools with high levels of collaboration and collective school processes. However, teachers reporting high levels of collaboration were just as likely as those reporting low levels to identify assessment workload as a major issue for their school.

Compared to assessment workload, other issues confronting schools were much more reflective of levels of teacher collaboration and collective school processes. The lower their level on these factors, the more likely it was that teachers would think that their school faced major issues around teaching quality, attracting or keeping good teachers, student achievement, student behaviour, the principal's leadership, getting good professional development, getting a good ERO review, and a declining school roll. It would certainly be harder to build and sustain collaborative school cultures with high teacher turnover, or poor principal leadership. Yet collaborative school cultures are also associated with higher teacher morale, and plans to stay at the school. For example, only 15 percent of the teachers who reported a very high level of collective school processes were thinking of leaving their school for another school in the next five years, in contrast to 58 percent of those who reported a very low level of collective school processes. Teachers who reported very low levels of collective school processes and teacher collaboration were no different from others in terms of their years of experience as teachers, but they were more likely to be in their first three years of work at their school. This does raise some questions, for example, were schools with higher teacher turnover more likely to have a higher proportion of teachers with less experience in the school? Or is it harder for teachers new to a school to become part of the school's collective culture, even when others in the school think it is operating at a good level?

Teacher and principal responses could be linked for 200 primary and intermediate schools, with the important caveat that the numbers of teachers responding at each of these schools varied from 1 to 14. Thus any links found can only be suggestive at best. What was found makes some sense, however. Principals' reports of difficulty finding suitable teachers to fill their vacancies increased as the level of collective culture and level of school processes reported by the school's teachers decreased. Schools whose principals reported sharing resources and giving mutual support to other local schools, and sharing professional development, had higher levels of collective school processes and teacher collaboration. Schools which were in competition with other local schools had lower levels of collective school processes and teacher collaboration.

Fewer teacher and principal responses could be linked for the 2009 secondary survey data; we did so for 122 schools, including from 1 to 14 teachers at each school. Secondary principal reports of competition with other local secondary schools were linked with their teachers' views of the quality of the school's collective culture, with competition with other local secondary schools most likely in schools where teachers gave low ratings, but other linkages seen with the primary data were not evident.

School characteristics

The differences between primary and secondary school teachers with regard to reports of collective practices and processes are the most marked in terms of school characteristics. There was little difference in primary teacher reports of these practices and processes that were associated with differences in school size, location (rural or urban), or the socio-economic community served by the school. Differences between primary and secondary schools were also apparent in a recent study of school leadership practices in 282 schools, which used school-wide teacher surveys to establish pictures of individual schools (Wylie & Hodgen 2010b). That study also showed school socio-economic community to play an independent role, over and above school type. Secondary schools, and those serving low-income communities, do face more complex situations, which would add to the difficulty of shifting schools to more collaborative professional cultures.

Change over time

Direct comparisons of primary teacher responses to the NZCER national survey in 2007 with 2010 responses shows some marked shifts in reports of collaborative school cultures, and some other shifts which may be related. These are not the same individuals, or the same schools, but a representative national sample for each year.

The doubling in views that teachers got enough time to work together to plan and discuss their work was mentioned on page 4. Levels of sharing between teachers were also higher since 2007, and there was an improvement in views of the quality of mentoring for new teachers (43 percent now thought this was very good or generally happened, up from 26 percent in 2007). Other marked changes on ratings of very good/generally happens for common items in the two surveys are given below.

- Analysis of student achievement to guide teaching and learning (44% in 2010, 18% in 2007)
- Setting useful targets for student achievement (41% in 2010, 19% in 2007)
- Support for risk taking and innovation in teaching (41% in 2010, 18% in 2007)
- Timely support for problems in teaching (40% in 2010, 20% in 2007)
- Teachers sharing ideas to improve student performance (37% in 2010, 14% in 2010)
- Good processes for group decisions and problem solving (69% in 210, 52% in 2007).
- Developing leadership skills among teachers (32% in 2010, 10% in 2007)

- Availability of career progression within the school (51% in 2010, 31% in 2007).

More teachers disagreed with the statement 'we let outside organisations dictate how we do things' (72 percent, up from 43 percent in 2007).

Improvements in student achievement were more likely to be mentioned as a main achievement over the last three years in 2010 (71 percent, up from 59 percent in 2007). Job satisfaction was higher in 2010 for primary teachers (50 percent strongly agreed that they enjoyed their job, up from 37 percent in 2007, and 86 percent said their morale was good, cf. 68 percent in 2007). Primary teacher work hours have stayed much the same in 2010 as in 2007 – a median of 18 hours a week over and above classroom hours of 32.5 a week, or an average of 50.5 hours a week. The 2010 respondents were also more positive about the fairness of their workload, and ability to manage job-related stress, though around 40 percent did not think their workload was manageable, much the same as in 2007. Thus these improvements in working together do not appear to have been 'add-ons' to existing ways of doing things, taking more time, but suggest that how New Zealand primary teachers work is shifting, with more productive use made of time and energy.

The role of policy in supporting collaborative work in schools

These positive changes in primary teachers' work can be related back to the policy changes providing more support for teachers to work together collaboratively that were described at the start of this paper. No one policy aspect on its own is likely to have been sufficient. What matters more is the degree of convergence in the supports available to schools, such as experiences within well-framed professional development of what can be achieved by, for example, teacher inquiry together into an aspect of their teaching, or learning conversations, and how to go about these, with the value placed on such approaches underpinned by making time available within collective employment contracts. Note that such ways of working have not been the specific target of policy, and they have not needed to be prescribed. They have been interwoven with curriculum, pedagogy, and assessment, as well as employment practices. The New Zealand situation shows that such an approach does lead to schools shifting their practices, with their sense of agency enhanced. It also shows that such a shift is by no means universal, and is more challenging for secondary schools in particular. This suggests that more systemic ways of connecting schools with each other, with new practices, and new kinds of resources, are needed.

References

Bishop. R., Berryman, M., Powell, A., & Teddy, L. (2007). Te Kotahitanga: Improving the educational achievement of Mäori students in mainstream education: Phase 2: Towards a whole school approach. Wellington: Ministry of Education.

Cowie, B., Hipkins, R., Keown, P., & Boyd, S. (forthcoming). *The shape of curriculum change.* Wellington: Ministry of Education.

Fallon, G. & Barnett, J. (2009). Impacts of school organizational restructuring into a collaborative setting on the nature of emerging forms of collegiality. *International Journal of Education Policy and Leadership* 4(9). (www.ijepl.org)

Fullan, M. (2010). *All Systems Go. The Change Imperative for Whole System Reform.* Thousand Oaks, CA: Corwin.

Hannay, L., Wideman, R., & Seller, W. (2006). *Professional learning to reshape teaching.* Toronto: Elementary Teachers' Federation of Ontario.

Hipkins, R. (2011). *Reshaping the secondary school curriculum:Building the plane while flying it? Findings from the NZCER National Survey of Secondary Schools 2009.* Wellington: New Zealand Council for Educational Research

Hipkins, R. (2010). *The evolving NCEA.* Wellington: New Zealand Council for Educational Research

Levin, B. (2008). *How to change 5,000 schools.* Cambridge, MA: Harvard Education Press.

Little, J.W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. *Teacher College Record* 91(4), 509-534.

McLaughlin, M. & Talbert, J. (2001). Professional communities and the work of high school teaching. Chicago: The University of Chicago Press.

Supowitz, J., Sirinides, P., & May, H. (2010). How principals and peers influence teaching and learning. *Educational Administration Quarterly* 46 (1), 31-56.

Wylie, C. (2007). *What can New Zealand learn from Edmonton?* Wellington: New Zealand Council for Educational Research

Wylie, C. (2010). Tomorrow's Schools after 20 years: can a system of self-managing schools live up to its initial aims? *New Zealand Annual Review of Education* 19, 5-29. Wellington: Faculty of Education, Victoria University.

Wylie, C. & Hodgen, E. (2010a). *NZCER 2010 Primary and Intermediate Schools National Survey. A snapshot of overall patterns and findings related to National Standards.* Wellington: New Zealand Council for Educational Research

Wylie, C. & Hodgen, E. (2010b). *Educational Leadership Practices Survey – baseline 2009 overall profile of schools in the Experienced Principals' development programme.* Wellington: Ministry of Education.

[iii] Teachers were also asked a set of items about their principal which related to their role as the person ultimately accountable for the school culture, and their modelling of learning.

[iv] Cross-tabulations of items against the four teaching collaboration and school process factors were used to explore relationships here and in the rest of this section.

[v] Secondary teachers were somewhat more likely than primary teachers to report that student behaviour caused serious disruption to their teaching (16 percent said it did this often, and 45 percent sometimes; 11 percent of primary teachers reported that this happened often, and 40 percent, sometimes.). Twenty-three percent of secondary and 11 percent of primary teachers had felt unsafe in their class (mostly occasionally). Thirty-three percent of secondary and 13 percent of primary teachers had felt unsafe in the school's playground, again mostly occasionally.