Shifts in Educational Leadership Practices Survey Patterns in the Experienced Principals' Development Programme 2009–10

Report prepared for the Ministry of Education

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Executive summary

This report describes the patterns of shifts in principal and school ratings of the scales that make up the Educational Leadership Practices (ELP) survey, from the start of principals' participation in the Ministry of Education-funded Experienced Principals' Development (EPD) programme in September to November 2009, to near its end, in November–December 2010. Of the principals who began the programme in 2009, 191 continued in 2010, with more entering the programme in 2010. The report uses data from 191 of the 305 principals (and schools) where the principals completed the ELP both at the beginning and end of the EPD programme.

The EPD programme was part of the Ministry of Education's leadership development plan, and providers were asked to emphasise two key priorities in 2010: the improvement of Māori student engagement and achievement, and the introduction of National Standards. The EPD programme involved 10 providers providing professional development and support to principal clusters, using joint sessions and school-based inquiry projects to improve school leadership practices that were linked to improved student achievement at individual schools. The particular focus was decided by the principal of each school for their school. The initial ELP survey results were used as a key piece of information, alongside other school data that principals could use to decide their school priority, and that providers could use formatively to work with principals individually and as a group. The ELP survey asks both principals and teachers to rate the effectiveness of their school leadership in ensuring good practice for seven aspects. It is based on the Kiwi Leadership Framework and the Educational Leadership Best Evidence Synthesis.

Principals' average scores on the overall ELP scale for the effectiveness of school leadership increased by a moderately strong effect size of 0.57 between 2009 and 2010. Their average rating of the support for their leadership of learning at the school also increased somewhat. There was no change in their average rating of the time and workload constraints on this aspect of the principal's role, indicating that any improvement can be seen as working "smarter" rather than "harder". There was an increase of 8 percent in the proportion who agreed or strongly agreed that "I am able to schedule enough time for the educational leadership part of my job". This increased from 46 percent in 2009 to 54 percent in 2010.

The items that shifted the most in principals' ratings (moderate to strong effect sizes of 0.45 to 0.6) were related to processes that increase teacher inquiry, using feedback and assessment results.

Principal ratings on the effectiveness of school leadership in relation to the Māori student success scale (which sits alongside the overall ELP scale) also increased (an effect size of 0.58). Interestingly, ratings for two items on this scale saw the only decrease between 2009 and 2010. These items were about the availability of relevant learning resources and curriculum for Māori, and it may be that as principals' and their leadership teams' understanding and actions in this area grew, they became more aware of gaps.

Teacher average ratings had been higher than principal average ratings in 2009, and they shifted much less in 2010, with an effect size of 0.12 on the overall scale. The shift was greater for the Māori student success scale (0.29), though this is at the low end of moderate change. Items that showed the greatest shift for teachers (moderate effect sizes of 0.3 to 0.49) were from the Māori success scale, and those related to processes that are useful for the national standards.

Within this overall positive picture based on averages, there are differences at the individual school level, as the figure below summarises.

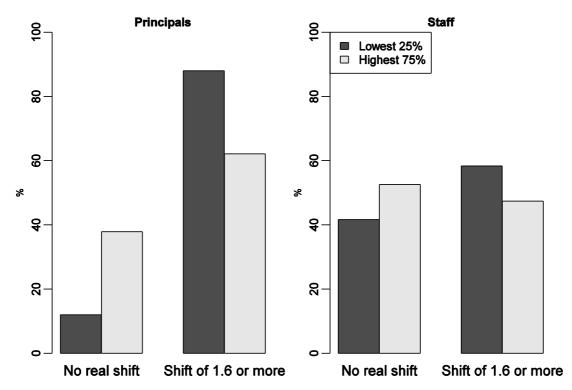


Figure 1 Growth in the overall ELP score between 2009 and 2010

Overall, 31 percent of principals showed negligible change on their overall ratings of their school's leadership (change in scale score of up to 1.5), 19 percent showed shifts of 1.6 to 4.9, 16 percent showed shifts of 5 to 9, 13 percent showed shifts of 9.1 to 13.9 and 19 percent, shifts of 14 or more on the scale. Greater shifts were evident for the principals whose ratings of their school's leadership effectiveness had been in the lowest quartile in

2009. Thirty-six percent of these principals increased their overall scale scores by 14 or more. Only 12 percent of this group's overall scale scores showed negligible growth. This may indicate the usefulness of the ELP survey results for this group in particular in 2009, when used for needs analysis alongside other school information.

Around 50 percent of schools (using aggregated teacher responses for each school) showed negligible change on their scoring on the overall ELP scale ratings, 26 percent showed shifts of 1.6 to 4.9 scale score units, 14 percent showed shifts of 5 to 9, 7 percent showed shifts of 9.1 to 13.9 and 3 percent, shifts of 14 scale score units or more. Schools with the lowest scores on the overall scale (using the principal's ratings) in 2009 showed greater shifts than others with 35 percent increasing the overall scale score by 5 percent or more, cf. 19 percent of other schools.

Secondary schools shifted less than other school types (e.g., primary and intermediate). There was an indication, too, that the focus that schools chose for their project had a bearing on the degree of their growth in ELP scores over the course of the year, though this may also reflect the making of a well-founded choice of focus in relation to existing school development and priorities.

The size of shifts over the year was otherwise unrelated to school characteristics, or to principal experience or years at the current school.

Just under half the principals identified an issue or event that had made it difficult to maintain the intended EPD focus or attention to the EPD programme, including a range of personal and school-related issues. Identifying such an issue was not related to the degree of shift shown between 2009–10 scores.

These shifts in principal and school perceptions of school leadership effectiveness for the EPD schools on the whole show links with both the particular process of the EPD—the use of inquiry into school-identified issues, using data—and the two priorities in educational policy affecting schools last year and included in the EPD programme, the push to improve Māori student achievement and the introduction of the National Standards.

While positive shifts were evident in many of the ELP principals and schools, levels on the scales and individual items show that there is room for further progress to be made, in working with schools to ensure that these leadership practices that are well-linked in research to positive outcomes for student learning are more widespread.

The findings of this report suggest certain factors that the Ministry of Education may like to take into account in its investment and policy decisions in its work on leadership development:

- Changes at leadership level take time to impact on actual practices within schools, particularly within secondary schools, so professional development needs to provide for longer term sustainable change.
- Those who rated lower in the initial survey gained the most, suggesting that targeting of professional development may be appropriate when access must be prioritised.
- Support for schools to develop their own capability through inquiry into their practices, using their own data, including the ELP survey, with support from outside appears to work well for many of the EPD schools. However, this approach did not make much of a difference to leadership practices for at least a third of the principals, indicating that professional development and support to improve school leadership practices may need to use a range of approaches. The United evaluation of EPD may be able to shed further light here.
- A focus on leadership practices related to teacher learning, curriculum quality and goal setting may be particularly fruitful—but the fact that these focuses showed associations with larger shifts may also be due to schools having established good bases for further development. But if we want to build on what has been achieved, it could be well worthwhile ensuring that schools that identify needs in these areas are supported.
- Policy priorities can be threaded through professional development using inquiry models that focus on schools' own identified priorities.

1. Introduction

The Experienced Principals Development programme (EPD) was a Ministry of Education-funded professional development programme for 305 experienced principals which ran from September 2009 until December 2010. Ten different providers delivered the programme around the country. The programme focused on developing the pedagogical leadership capability of experienced principals to enable them to enhance effective teaching and learning in their schools. Principals worked with their professional development provider, often through shared sessions and discussions with other principals, undertaking projects related to their school's goals for student achievement. The programme also focused on distributed leadership.

The first step in the programme was for participating principals and their teaching staff to complete the Educational Leadership Practices (ELP) survey. This provided baseline data to inform their plan of development for the next 12 months. The aggregate picture from this data was also used to get a picture of the ELP patterns for experienced principals. This survey was completed again by both principals and their teachers at the end of the EPD programme.

This report analyses information from the two ELP surveys used in the EPD programme to identify if there were any shifts in school and principals' leadership effectiveness ratings that might be associated with participation in the programme. This analysis complements a formative and summative evaluation based on surveys of participants and interviews with providers and some participants undertaken by Howard Youngs of Unitec for the Ministry of Education. Our analysis is limited to the ELP survey data only. It is not clear how much of a shift one might expect in the year between the surveys. For example, some projects may have been ready to run at the start of the 2010 school year; others may have been more complex, or need longer to construct with others in the school. Thus this report is as much about seeing what shifts might occur during the course of a school year, as it is in providing some material in relation to the EPD programme.

In addition, the information from these two ELP surveys has been used to contribute to a national sample for the ELP, which can provide national benchmarks for schools to use. The NZCER report describing the national sample patterns and these benchmarks will be available later in 2012.

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Wylie, C., & Hodgen, E. (2011). Education Leadership Practices survey baseline 2009 overall profile of schools in the Experienced Principals' Development programme. Wellington: Ministry of Education. Available at www.educationleaders.govt.nz

Of the 282 principals who participated in EPD and the ELP survey in 2009, 191 took part in the ELP at the end of 2010. This report is based on analysis of the shifts in surveys undertaken by these principals and their school staff who completed the survey. The principals who did not do the ELP survey in 2010 did not share any specific school or personal characteristics that might affect interpretation of the final results, except for the significant lower proportion of Māori principals. In the 2009 ELP survey, 30 principals identified their ethnicity as Māori, but of this group only 12 remained in 2010. We do not know why these principals did not continue with the survey, or whether they had also left the EPD. If the latter, in the case of Māori principals it may be to do with the programme being culturally inappropriate, not meeting their specific needs or the high workload experienced by Māori leaders. The loss of a significant number of Māori principals means that the overall patterns reported here may not apply to Māori principals and their schools.

In Section 2 we look at the ELP survey, participation in each round and outline the methodology used in the analysis of survey results.

Section 3 provides a description of principal and teacher characteristics, the ELP focus of principals' projects within their EPD work and teacher views of their work.

In Section 4 we report the overall patterns of shifts in principal and teacher responses between 2009 and 2010, on the ELP scales, and for the items within each scale.

Section 5 looks at the variability within the overall pattern, with a focus on the shifts made by principals who had given low ratings to their school leadership effectiveness in 2009, and the items that showed the greatest shifts between 2009 and 2010. It considers how the two key policy emphases that were included in the EPD framework and the inquiry process used in the EPD are evident in the patterns of shifts.

Section 6 draws some conclusions about the patterns evident in the shifts and in the levels on the ELP scales, with some suggestions for the Ministry of Education to consider in its work on school leadership development.

2. The ELP survey, participation and analysis

The ELP survey

The ELP survey is designed to provide a robust picture of how effective a school's teachers perceive the school's educational leadership to be in those key aspects that our current evidence shows are the ones most likely to have an impact on teaching and learning.

It covers these nine different aspects of school educational leadership:

- Goal Setting
- Strategic Resourcing
- Curriculum Quality
- · Quality of Teaching
- Promoting and Participating in Teacher Learning and Development (Teacher Learning)
- Ensuring a Safe and Orderly Environment
- Ensuring Educationally Powerful Connections with Families, Whānau and Community
- Māori Success
- Principal Leadership.

These aspects are based on the vision for principals as educational leaders set out in the *Kiwi Leadership for Principals* (KLP),² and the dimensions for effective educational leadership practice from the *School Leadership Best Evidence Synthesis*.³

The ELP survey's main use is for formative school development, and it therefore includes some highly aspirational items. At an aggregate level, it can also be used as a source of information to monitor the overall strength of New Zealand school leadership, and to gauge the effectiveness of policy aimed at supporting and strengthening this leadership.

The overall leadership scale used in the ELP survey is constructed from the seven aspects of school leadership given in italics above. This enables the survey to be used to provide an overall school leadership level for each school. A companion report on the national sample results on the ELP survey that sets out its methodology, and provides national benchmarks, will be published later in 2012.

² Ministry of Education. (2008). *Kiwi leadership for principals. Principals as educational leaders.* Wellington: Author.

³ Robertson, V., Hohepa, M., & Lloyd, C. (2009). *School leadership and student outcomes: Identifying what works and why.* Best Evidence Synthesis Iteration [BES]. Wellington: Ministry of Education.

Process for carrying out the survey

Principals participating in EPD and the teaching staff from their schools completed the ELP survey electronically during September to November 2009 and again at the end of 2010. Principals and staff were asked the same questions for each of these nine aspects of the scale. They also provided their sources of evidence for their judgement (personal observations, school documentation or other sources). Principals answered a further set of questions related to the school context for pedagogical leadership. Teachers answered a short set of questions related to their morale and workload. Both also answered questions about the length of their professional experience and demographic characteristics.

Not all schools that took part in 2009 completed the surveys again in 2010 (Table 1). There were 191 responses from principals in both 2009 and 2010, and from staff at 197 schools.

Table 1 ELP survey responses in 2009 and 2010

| Respondents | 2009 only | Both 2009 and 2010 | | |
|--------------------------------|-----------|--------------------|--|--|
| Principals | 91 | 191 | | |
| Teachers | 1,318 | 3,398 in 2009 | | |
| | | 2,296 in 2010 | | |
| Schools with teacher responses | 74 | 197 | | |

Individual teachers could not be tracked, so it is not known how many of the teachers who took part in 2009 also responded to the 2010 survey. Approximate average school response rates, based on the available data in 2010 when the principals were asked to give the numbers of teachers on their staff, are 74 percent in 2009 (assuming equal numbers of teachers in 2009 and 2010) and 64 percent in 2010.

On the whole, the school profiles of those that took part in both 2009 and 2010 ELP rounds are similar to those that took part in 2009. There is an overrepresentation of primary schools, and those with low levels of Māori enrolment, and an underrepresentation of deciles 1–4 schools. Table 2 describes the school profiles.

Table 2 Profile of participating EPD schools—school characteristics

| | EPD ELP schools 2009 % (<i>n</i> =282) | EPD ELP schools 2010 % (<i>n</i> =191) |
|--------------------------------------|---|---|
| School type | | |
| Primary | 75 | 79 |
| Intermediate | 6 | 6 |
| Composite | 2 | 3 |
| Secondary | 16 | 12 |
| Other | 1 | 1 |
| School size (U-grade) | | |
| U1 & U2 | 14 | 14 |
| U3 & U4 | 36 | 37 |
| U5 & U6 | 35 | 37 |
| U7+ | 16 | 13 |
| Location | | |
| Urban | 79 | 81 |
| Rural | 21 | 19 |
| Socioeconomic decile | | |
| 1–2 | 16 | 15 |
| 3–4 | 22 | 19 |
| 5–6 | 19 | 21 |
| 7–8 | 22 | 24 |
| 9–10 | 21 | 21 |
| Proportion of Māori students on roll | | |
| Less than 8% | 16 | 18 |
| 8–14% | 27 | 25 |
| 15–30% | 29 | 32 |
| 31% + | 28 | 24 |

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

This report is focused on any changes in ratings of leadership practices that may be associated with participation in EPD. Therefore the report is based on the data from the 191 principals and the staff in their schools who participated in both 2009 and 2010.

Analysis

The focus of the analysis in this report is to establish any shifts in ratings between 2009 and 2010. We have analysed the patterns of shift using two units of analysis: individual principals, and then, the individual school, using teacher scores only. To provide frequency descriptions at the school level (e.g., the proportion who score highly for a particular scale item), we have used the average teacher score for each school.

Teachers have been aggregated into something approximating a one entry per school data set. Since large schools provided many teacher responses while smaller schools may only have provided one or two, this means that smaller schools are given more weight in the resulting school picture. However, there is very little difference between this picture based on aggregation to the individual school level and the picture we get from using individual teachers as our unit of analysis, which gives too much weight to the big schools. Thus the overall picture based on schools is sufficiently robust.

We calculated the means and standard deviations on the ELP scales, for 2009 and 2010 for this group of 191 principals and schools. Next, we calculated the difference between the 2010 and 2009 means, and the effect sizes, with confidence intervals, for any differences found. A simple paired *t*-test (of whether the two means for each year were the same or not) was used to test for statistical significance.

As a general rule of thumb, differences of about 8 to 15 percentage points may be indicative of real differences between 2009 and 2010, particularly when there is a consistent pattern to the responses.

We used cross-tabulations, exploratory plots and a series of linear models⁴ to see whether differences between 2009 and 2010 were attributable to **school demographic differences** (type, decile, urban/rural, U-grade, percentage of Māori students in the school) or to **personal differences between principals** (gender, age, length of time they have been a principal, ethnicity). We also used cross-tabulations to compare the shifts over time for those principals and schools that had lower scores than others in 2009, to see if low-performing schools made greater progress. We also looked at the consistency between principal and school responses, using correlations. Correlations over about 0.45 rate as being "moderate" and over 0.7 are "moderately strong". Correlations under about 0.2 are generally too low to be relevant.

and school (e.g., school type and decile).

The exploratory plots were scatter plots of the 2009 and 2010 outcomes, and of the growth against 2010 outcomes, to get a picture of the strength and nature of the relationships.
We built a series of models for both the 2010 outcomes and the amount of growth by the 2009 outcome (as a covariate) and the characteristics of the principal (length of experience, gender, etc.)

Principal and teacher characteristics, principal EPD focus and teacher views of work

Principal characteristics

These are the characteristics of the 191 principals who participated in both 2009 and 2010, as reported in 2010.

The number of years that these principals had been in that role was fairly evenly spread, with the fewest (nearly 7 percent) having been principals for up to 5 years. Of these, 0.5 percent (one principal) had been in their role for less than 2 years: a rather shorter time than one might have thought for the target group of the EPD.⁵ Over a third had been principals for 6 to 10 years (39 percent), 25 percent had been principals for 11 to 15 years and 28 percent for more than 15 years. Around 37 percent of the principals had been at their current school for 5 years or less, 37 percent had been at that school for 6 to 10 years, 14 percent for 11 to 15 years and 11 percent for over 15 years.

More than half (60 percent) of the principals had been in senior management for up to 5 years prior to becoming a principal, with over a quarter in senior management for less than 3 years. Twenty-eight percent had been in senior management roles for 6 to 10 years, 7 percent for 11 to 15 years and 4 percent for more than 15 years.

Interestingly, given that 45 percent of principals nationally are female (using 2008 figures), 57 percent of this group were female.

The vast majority of principals were Pākehā. Of the 191 principals in both years of the programme, 96 percent of the principals were Pākehā. Most of these principals (64 percent) were aged 50 to 59 years, with 17 percent over 60, 16 percent aged 40 to 49 and 2 percent under age 40.

Principal focus in their school EPD project

We asked principals which of the ELP dimensions had been a focus in their EPD project. Two-thirds identified two or more of these dimensions. Quality of teaching or teacher learning and development were most likely to have been the focus, followed by Māori

These figures are somewhat different from the profiles in the NZCER 2007 national primary survey, and 2009 national secondary survey.

success. A safe and orderly environment was the dimension least likely to have been the focus for their EPD project.

Table 3 **EPD focus**

| Focus | Principals (<i>n</i> =191) % |
|------------------------------------|----------------------------------|
| Quality of teaching | 59 |
| Teacher learning and development | 59 |
| Māori success | 34 |
| Curriculum quality | 30 |
| Educationally powerful connections | 26 |
| Goal setting | 21 |
| Strategic resourcing | 9 |
| Safe and orderly environment | 4 |

The 2009 baseline report showed that Māori success and teacher learning were the lowest rated scales, followed by the quality of teaching, and strategic resourcing. These focuses suggest that the ELP survey may have played some role in identifying school needs, along with the overarching aims of the EPD programme (and associated policy priorities for 2010), and the building on work most schools were already doing to introduce the New Zealand Curriculum in 2010.

Just over half the secondary principals taking part in both years identified only one of these dimensions as a focus area, cf. 33 percent of primary principals and 27 percent of the intermediate principals. Table 4 shows some differences in the focus areas as well. Secondary principals were most likely to identify Māori success or teacher learning and development. This may reflect the attention given to Māori student engagement and achievement in secondary schools in the last few years, with such prominent professional development as Te Kōtahitanga, with schools choosing to consolidate or further existing development through the EPD. Māori success was also a strong theme for intermediate principals, along with quality of teaching. Primary principals were most likely to identify quality of teaching or teacher learning and development.

Table 4 EPD focus by school type

| Focus | Primary principals (<i>n</i> =149) | Intermediate principals (<i>n</i> =11) | Secondary principals (<i>n</i> =23) |
|------------------------------------|-------------------------------------|---|--|
| | % | % | % |
| Quality of teaching | 63 | 73 | 26 |
| Teacher learning and development | 61 | 36 | 52 |
| Māori success | 32 | 64 | 44 |
| Curriculum quality | 35 | 18 | 9 |
| Educationally powerful connections | 24 | 46 | 26 |
| Goal setting | 22 | 9 | 17 |
| Strategic resourcing | 10 | 0 | 0 |
| Safe and orderly environment | 5 | 0 | 4 |

Māori success as a focus was most likely in schools that had a roll with more than 30 percent Māori students (57 percent), but there was no significant difference between schools with few Māori students (24 percent) and those with 15 to 30 percent Māori students (28 percent).

Deciles 7–10 school principals were less likely to identify quality of teaching than were deciles 1–6 school principals. Deciles 9–10 school principals were most likely to identify only one focus for their EPD project (48 percent), and deciles 1–2 school principals, four or more (39 percent cf. 18 percent of deciles 3–10 school principals).

We also asked the principals if there were "any issues or events occurring for you or the school that made it difficult for you to maintain your intended EPD focus or attention to your EPD project". Forty-eight percent said there had been such an issue or event. Experiences of distraction from the EPD work were unrelated to school characteristics.

Those who had such an issue or event were asked to describe it, in an open-ended question. Of the 48 percent who identified an issue, 15 to 20 percent identified one or more of the following: time pressures; the principal undertaking other study or taking a sabbatical (these were experienced principals); dealing with their own or family illness; or the introduction of National Standards. Mentioned by 5 to 7 percent of principals each were the school having its Education Review Office (ERO) review, taking part in other initiatives, teaching staff changes, managing out incompetent staff, property development and refurbishment, lack of support from their EPD provider, student issues and the Canterbury earthquake, which meant some principals could not complete their projects. Eleven principals changed their project focus, or realised that their project would take longer than the length of the EPD.

Teacher characteristics

Teachers from 197 schools whose principals participated in EPD in both 2009 and 2010 completed the survey in both years. (The higher number of schools is because some staff returned surveys where the principal did not and data from these teachers have been included.) While the schools were the same, actual teachers on the staff may have changed between 2009 and 2010, and response rates were lower in 2010. Individual teacher responses cannot be tracked. All teacher ratings of school leadership have therefore been aggregated to "school" data. When we refer to "school" it is this aggregation at the school level we refer to. Demographic data are reported, however, at the individual teacher level for the 2,996 respondents from these schools who took part in 2010.

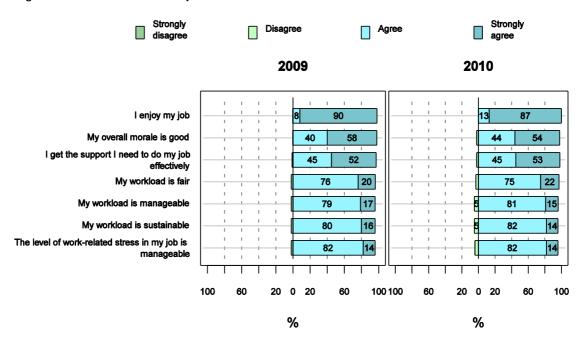
Many of the teachers were highly experienced, and 42 percent had been at their current school for over 5 years. Just over half the teachers had roles of responsibility for leading or facilitating other staff work beyond their own classroom, indicating that formal school leadership is operating in a number of different structures and networks. Thirty percent were senior and middle school managers, such as deputy or assistant principals, deans, syndicate or faculty leaders or heads of department; and 22 percent were specialist teachers.⁶

There were slight slippages between 2009 and 2010 in terms of teachers' enjoyment of their work, sense of being supported and morale levels, with an effect size of 0.17 (confidence interval of 0.02 to 0.3). However, small shifts are as likely to be due to changes in the wider teaching context between 2009 and 2010 and changes in individual situation, as school participation in EPD.

In 0 and the similar figures that follow, only segments representing 5 percent or more are labelled.

⁶ We do not have information on the roles for 7 percent.

Figure 2 **Teacher work experience**



4. Shifts between 2009 and 2010

Differences in responses to the ELP surveys in 2009 and 2010 were calculated from the responses of the principals and teaching staff from the 191 schools that participated in both 2009 and 2010. First, we summarise the aggregate patterns of shifts: for principals, then school staff. Next, we compare the rate of shifts between principals and staff. Then we look at the consistency in the ratings of individual schools and principals between 2009 and 2010. Finally, we give the detailed picture of the aggregate shifts for each scale, and each item within that scale. Overall, we find some positive shifts, and no large negative shifts.

Overall shifts

Principals

Principal responses showed marked positive shifts in almost all items rated within each leadership aspect.⁷ The exception was in the barriers to pedagogical leadership: these often structural or system-based issues had not changed. The principals did feel that they were receiving more or better support for their pedagogical leadership, but the things standing in their way (typically by occupying time) had not changed.

Ensuring a safe and orderly environment was the aspect of school leadership least likely for principals to rate more highly in 2010 than they had in 2009. This aspect was not one of the main focuses of principals in their EPD projects. In Table 5, the size of the shifts is given in the third column, the difference between the mean ratings given by principals in 2010 compared with the ratings they gave in 2010. For example, the support aspect of pedagogical leadership showed a small increase of 0.12 (standard deviation of 0.33) between 2009 and 2010 (from 3.01, standard deviation of 0.35, to 3.12, standard deviation of 0.35), which was statistically significant with p < 0.001. This corresponds to a relatively small effect size of 0.23, but this can be seen as a positive effect because its confidence interval from 0.08 to 0.38 does not include 0.8

⁷ The evidence for "growth" comes from both the significant *t*-test *and* from effect sizes that are positive (all confidence intervals do not include 0, except for that of the barriers to pedagogical leadership).

The effect sizes and their confidence intervals were calculated according to the guidelines in Schagen, I., & Hodgen, E. (2009). How much difference does it make? Notes on understanding, using, and calculating effect sizes for schools. Wellington: Ministry of Education.

Downloaded from www.educationcounts.govt.nz/publications/schooling/36097/36098

Table 5 Summary of shifts on the ELP survey 2009–10 for principals

| Leadership aspects | 2009 Mean (SD) | 2010 Mean (SD) | Difference (SD) significance | Effect size (confidence interval) ^a |
|---|-------------------|-------------------|------------------------------------|--|
| Ensuring the quality of teaching ^b | 55.0 (9.0) | 61.2 (10.8) | 6.3 (10.1) *** | 0.63 (0.49, 0.77) |
| Promoting and participating in teacher learning and development | 55.5 (10.0) | 62.5 (11.7) | 7.1 (11.6) *** | 0.71 (0.57, 0.84) |
| Māori students' success ^c | 2.86 (0.63) | 3.15 (0.62) | 0.29 (0.60) *** | 0.58 (0.43,0.73) |
| Ensuring curriculum quality | 54.3 (10.2) | 61.0 (13.0) | 6.8 (10.8) *** | 0.68 (0.53, 0.84) |
| Ensuring educationally powerful connections with families, whānau and community | 54.1 (10.3) | 60.0 (11.8) | 6.1 (10.1) *** | 0.61 (0.45, 0.76) |
| Goal setting | 54.4 (11.6) | 60.4 (13.1) | 6.0 (11.6) *** | 0.60 (0.45, 0.75) |
| Strategic resourcing | 58.0 (10.2) | 63.4 (11.3) | 5.5 (10.5) *** | 0.55 (0.40, 0.70) |
| Ensuring a safe and orderly environment | 59.7 (9.8) | 62.3 (10.2) | 2.8 (10.2) *** | 0.28 (0.14, 0.42) |
| Overall scale | 55.7 (8.3) | 61.3 (10.3) | 5.7 (8.6) *** | 0.57 (0.41, 0.72) |
| Effectiveness of principal leadership ^b | 3.68 (0.53) | 3.90 (0.40) | 0.22 (0.56) *** | 0.44 (0.33, 0.55) |
| Pedagogical leadership context: Support ^d | 3.01 (0.35) | 3.12 (0.35) | 0.12(0.33)*** | 0.23 (0.08, 0.38) |
| Pedagogical leadership context: Barriers to pedagogical leadership ^d | 2.52 (0.45) | 2.50 (0.48) | -0.02 (0.39) NS | -0.05 (-0.21, 0.12) |

^a Effect sizes calculated using SD of 10 for the scale scores, 0.5 for the scores calculated as the mean of items.

Significance levels: NS = p > 0.05; * = 0.01 < p < 0.05; ** = 0.001 < p < 0.01; *** = p < 0.001.

We undertook cross-tabulation and linear models to see whether differences in the size of shifts were related to 2009 score levels, school characteristics, principals' personal characteristics, the area of focus in the EPD or the EPD provider.

Overall, principals who were in the lowest quartile of scores on the overall scale in 2009 had larger increases in their ratings in 2010 than others. We investigate this more in Section 4.9

^b Scale scores for the seven aspects of principal leadership and the overall scale that each of these aspects contributes to; with a mean of 50.

 $^{^{\}circ}$ Mean of items on a 5-point scale where 1 = Ineffective and 5 = Outstandingly effective.

^d Mean of items on a 4-point scale where 1 = Strongly disagree and 4 = Strongly agree.

A part of this increase will be due to "regression to the mean". However, it is unlikely that this alone accounted for the size of the changes found.

However, school characteristics were unrelated to the degree of shift in principal ratings of the effectiveness of the school's leadership practices, other than school type. Primary schools were more likely to make larger shifts than were secondary or intermediate schools.

Principal gender, ethnicity, length of experience as a principal and length of time at their current school were not related to the degree of shift in principal ratings between 2009 and 2010.¹⁰ There were no clear relationships between the degree of shift and provider.

We found some interesting patterns related to the principal focus within EPD. Average shifts were higher on the overall scale score for those who had made goal setting, strategic resourcing or teacher learning their focus (or one of their focuses). Looking at shifts within the scale for each aspect, we also found that increased ratings were evident for the area of focus for those who identified it as their EPD focus for the areas of goal setting, strategic resourcing and teacher learning, compared with those who did not have the area as their focus.

This was not because those who chose these areas as their focuses had lower average scores in 2009—indeed, there was very little difference between either the overall ELP score or ratings on individual aspect scales evident for those who chose different focuses. In other words, a focus on, say, teacher learning, was just as likely to be chosen by a principal with a medium score on the overall ELP scale as one with a lower score in 2009, and one whose ratings on the teacher learning scale had been high as much as one whose ratings had been low.

The lowest average shifts in scores on the overall scale were found for those who focused on educationally powerful connections with family, whānau and community, Māori student success or quality of teaching. Those who had these focuses also showed no higher average shift in ratings for the respective scale. That is, those who focused on, say, for example, Māori student success, did not show higher increases in their ratings than those who did not have this as their focus.

It is not clear from the survey data alone why we should see these patterns related to a particular focus, and the reasons may differ.

Schools

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Shifts in school opinions between 2009 and 2010 were less marked than for principals. The four aspects of leadership effectiveness where the staff did identify significant growth were:

Ensuring curriculum quality

Analysis of variance was used to test for differences in score differences associated with characteristics of the school/principal. Paired *t*-tests were used to test the significance of the overall difference on each scale.

- Promoting and participating in teacher learning and development
- Ensuring educationally powerful connections with families, whānau and community
- Māori students' success.

Table 6 Summary of shifts on the ELP survey 2009–10 for schools

| Leadership aspects | 2009 Mean (SD) | 2010 Mean (SD) | Difference (SD) significance | Effect size (confidence interval) ^a |
|---|-------------------|-------------------|------------------------------------|--|
| Ensuring the quality of teaching | 59.0 (9.6) | 59.8 (9.8) | 0.9 (8.1) NS | 0.09 (-0.07, 0.25) |
| Promoting and participating in teacher learning and development | 59.2 (10.1) | 61.1 (10.1) | 2.0 (8.5) *** | 0.20 (0.04, 0.36) |
| Māori students' success ^b | 3.06 (0.51) | 3.21 (0.50) | 0.14 (0.43) *** | 0.29 (0.13, 0.44) |
| Ensuring curriculum quality | 59.7 (10.1) | 61.4 (10.5) | 1.7 (7.6) *** | 0.17 (0.003, 0.34) |
| Ensuring educationally powerful connections with families, whānau and community | 59.3 (10.3) | 61.5 (10.2) | 2.3 (8.5) *** | 0.23 (0.07, 0.39) |
| Goal setting | 60.2 (10.9) | 61.5 (10.4) | 1.2 (7.8) * | 0.12 (-0.05, 0.30) |
| Strategic resourcing | 60.0 (9.8) | 61.3 (9.8) | 1.2 (7.1) ** | 0.12 (-0.04, 0.29) |
| Ensuring a safe and orderly environment | 60.1 (10.6) | 60.4 (10.1) | 0.4 (7.9) NS | 0.04 (-0.13, 0.20) |
| Overall scale | 59.5 (10.3) | 60.7 (9.7) | 1.2 (7.8) * | 0.12 (-0.05, 0.28) |
| Effectiveness of principal leadership ^b | 3.80 (0.62) | 3.88 (0.55) | -0.03 (0.23) * | -0.07 (-0.22, 0.08) |
| Teaching work and experience ^c | 3.18 (0.24) | 3.15 (0.26) | 0.08 (0.56) NS | 0.17 (0.02, 0.32) |

^a Effect sizes calculated using SD of 10 for the scale scores, 0.5 for the scores calculated as the mean of items.

Significance levels: NS = p > 0.05; * = 0.01 < p < 0.05; ** = 0.001 < p < 0.01; *** = p < 0.001.

Principals compared with staff

The growth evident in principal rating overall was clearly larger than that reported by their staff at the aggregate school level. Table 7 summarises this comparison between principals and staff in 2009 and 2010. The differences and effect sizes in this table are between principals and staff rather than between 2009 and 2010 measures. A *negative* value indicates a higher score for *staff*; a *positive* value indicates a higher score for *principals*. This table shows that, while principal ratings were significantly lower than staff ratings in 2009, by the end of 2010 they were almost identical. The only aspects where there was a possible small difference was with regard to:

 strategic resourcing and ensuring a safe and orderly environment, where principals gave slightly higher ratings than the staff did

^b Mean of items on a 5-point scale where 1 = Ineffective and 5 = Outstandingly effective.

^c Mean of items on a 4-point scale where 1 = Strongly disagree and 4 = Strongly agree.

• ensuring educationally powerful connections with families, whānau and community, where staff ratings were slightly higher.

Table 7 Principal and school shifts 2009–10 compared

| | 2009 | | | | 2010 | | | |
|--|-------------------|-----------------|---|--|-------------------|----------------|---|--|
| Aspects | Principal (SD) | Schools (SD) | Differ- ence (SD) signif- icance | Effect size (confidence interval) ^a | Principal (SD) | School (SD) | Differ- ence (SD) signif- icance | Effect size (confidence interval) ^a |
| Ensuring the quality of teaching | 55.0 (9.0) | 59.0 (9.6) | -4.2 (9.6) *** | -0.42 (0.28, 0.56) | 61.2 (10.8) | 59.8 (9.8) | 1.0 (10.6) NS | 0.10 (-0.04, 0.24) |
| Promoting and participating in teacher learning and development | 55.5 (10.0) | 59.2 (10.1) | -3.9 (10.4) *** | -0.39 (0.25, 0.53) | 62.5 (11.7) | 61.1 (10.1) | 0.9 (11.7) NS | 0.10 (-0.04, 0.23) |
| Māori students' success ^b | 2.86 (0.63) | 3.06 (0.51) | -0.20 (0.55) *** | -0.40 (0.25, 0.54) | 3.15 (0.62) | 3.21 (0.50) | -0.05 (0.53) NS | -0.11 (-0.05, 0.26) |
| Ensuring curriculum quality | 54.3 (10.2) | 59.7 (10.1) | -5.9 (9.9) *** | -0.59 (0.44, 0.74) | 61.0 (13.0) | 61.4 (10.5) | -0.74 (11.8) NS | -0.07 (-0.07, 0.22) |
| Ensuring educationally powerful connections with families, whānau and community | 54.1 (10.3) | 59.3 (10.3) | -5.6 (10.7) *** | -0.56 (0.42, 0.70) | 60.0 (11.8) | 61.5 (10.2) | -1.9 (10.5) * | -0.19 (0.04, 0.34) |
| Goal setting | 54.4 (11.6) | 60.2 (10.9) | -6.2 (11.8) *** | -0.62 (0.48, 0.76) | 60.4 (13.1) | 61.5 (10.4) | -1.36 (12.1) NS | -0.14 (-0.28, 0.005) |
| Strategic resourcing | 58.0 (10.2) | 60.0 (9.8) | -2.4 (9.7) ** | -0.24 (0.09, 0.39) | 63.4 (11.3) | 61.3 (9.8) | 1.9 (10.5) * | 0.19 (0.05, 0.34) |
| Ensuring a safe and orderly environment | 59.7 (9.8) | 60.1 (10.6) | -0.7 (11.1) | -0.07 (-0.06, 0.19) | 62.3 (10.2) | 60.4 (10.1) | 1.6 (10.0) * | 0.16 (0.02, 0.30) |
| Overall scale | 55.7 (8.3) | 59.5 (10.3) | -4.1 (9.5) *** | -0.41 (0.27, 0.55) | 61.3 (10.3) | 60.7 (9.7) | 0.4 (9.7) NS | 0.04 (-0.11, 0.19) |
| Effectiveness of principal leadership ^b | 3.68 (0.53) | 3.80 (0.62) | -0.13 (0.57) ** | -0.27 (0.12, 0.41) | 3.90 (0.40) | 3.88 (0.55) | 0.001 (0.56) NS | 0.002 (-0.11, 0.11) |

^a Effect sizes calculated using SD of 10 for the scale scores, 0.5 for the scores calculated as the mean of items. A negative value indicates a higher score for schools; a positive value indicates a higher score for principals. All confidence intervals are given as positive values.

^b Mean of items on a 5-point scale where 1 = Ineffective and 5 = Outstandingly effective.

Significance levels: NS = p > 0.05; * = 0.01 < p < 0.05; ** = 0.001 < p < 0.01; *** = p < 0.001.

Consistency at individual schools

We looked at two aspects of consistency across 2009–10. Firstly, we considered the degree to which rating levels on the ELP were consistent between 2009–10 for individual principals and schools. Then we looked to see what consistency there was between each principal and their school (staff).

There was a high degree of consistency between the level of each rating in 2009 and in 2010 when we looked at individual principals and schools. If a high rating was given in 2009, the 2010 rating also tended to be high. This was also true for the low ratings. Almost all the correlations would rate as being "moderate" (over about 0.45) to "moderately strong" (over 0.7).

The staff ratings tended to be more consistent than those of the principals, but this is not surprising as they are based on aggregated data, which would show less variability than data for a particular individual.

Table 8 gives the correlations for this consistency between 2009 and 2010, in the first two columns. Perceptions of the effectiveness of principal leadership tended to be the least correlated across the 12 to 15-month period for both principals and teachers. However, there were four "outlier" schools. ¹¹ When these schools are taken out of the analysis, the correlations increased markedly, from 0.31 to 0.56 for principals, and from 0.52 to 0.7 for schools.

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average, breaking the "pattern" shown by the other schools.

These schools went against the overall trend on the question of principal leadership. In 2009, all four schools were judged low on principal leadership by both the principal and the staff. In 2010, they all received markedly higher ratings by both principals and staff—an increase that was well above the

Table 8 Correlations between 2009 and 2010 ELP responses for principals and staff, and between principals and staff in 2009 and 2010

| Aspects of school leadership | Correlations (consistency) of responses 2009 and 2010 | | In each year, did the principal and staff responses agree? | | |
|---|---|-------|--|--------------|--|
| | Principals | Staff | 2009 | 2010 | |
| Ensuring the quality of teaching | 0.49 | 0.65 | 0.46 | 0.47 | |
| Promoting and participating in teacher learning and development | 0.44 | 0.64 | 0.44 | 0.43 | |
| Māori students' success | 0.55 | 0.64 | 0.54 | 0.55 | |
| Ensuring curriculum quality | 0.59 | 0.73 | 0.52 | 0.51 | |
| Ensuring educationally powerful connections with families, whānau and community | 0.59 | 0.65 | 0.45 | 0.55 | |
| Goal setting | 0.56 | 0.73 | 0.44 | 0.48 | |
| Strategic resourcing | 0.53 | 0.73 | 0.51 | 0.50 | |
| Ensuring a safe and orderly environment | 0.47 | 0.70 | 0.36 | 0.49 | |
| Overall scale | 0.59 | 0.70 | 0.48 | 0.52 | |
| Effectiveness of principal leadership | 0.31 | 0.52 | 0.50 | 0.28 | |
| Pedagogical leadership context: Support | 0.57 | - | - | - | |
| Pedagogical leadership context: Barriers to pedagogical leadership | 0.66 | - | - | - | |
| Teaching workload and morale | _ | 0.60 | _ | _ | |

Correlations between principal and staff views at individual schools were pretty stable between 2009 and 2010. The correlations did increase in relation to ensuring a safe and orderly environment, and ensuring educationally powerful connections. The consistency between principal and school views is lowest in relation to the effectiveness of the principal's leadership (staff overall were more positive about this than principals). If the four outlier schools are excluded, then the correlation is 0.18 in 2009, increasing to 0.28 in 2010.

Shifts within each scale

Here we give the detail for each of the scales used in the ELP, and identify some common themes across the scales. We start with looking at the scale we have called "(Ensuring) Māori student success".

Māori student success

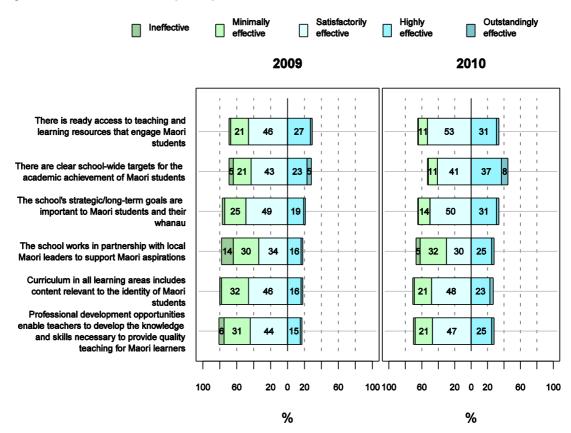
The items that comprise the Māori student success scale were originally included in the seven scales that make up the overall school leadership scale. They were less correlated with the individual scales they were in than with each other, so they were drawn out to form a distinct scale. Nonetheless, schools that had higher scores than others on the Māori student success scale were also likely to give higher ratings for their school leadership on the seven scales. Conversely, only one of the schools with low scores on the Māori student success scale had high ratings for these other aspects of school leadership, though there were some that did score at a medium-high level. Thus school leadership and serious engagement with Māori achievement was consistent with school leadership practices identified in the research literature as most likely to have positive impacts for all students.

Principal responses

Principals clearly felt that the effectiveness of the school leadership practices for their Māori students and whānau was better in 2010 than in 2009 with an overall effect size of 0.58 (confidence interval of between 0.4 and 0.7). The biggest shifts were around setting strategic goals and targets for Māori students, and professional development, which would be typical first steps in improving practice. A further gain was around developing partnerships with Māori leaders. Lesser gains were seen in relation to having relevant curriculum content and improved resources. One would expect to see improvements in these areas over time. Interestingly, there was an increase in the proportion of principals who were now more critical of their school leadership effectiveness in ensuring ready access to resources that engaged Māori students, and having clear school-wide targets for the academic achievement of Māori students, suggesting that they were now more aware of needs in this area. These are the only two items in the ELP scales relating to the effectiveness of school leadership that show this pattern.

While there were significant improvements in this scale, the principals generally rated leadership in this area low compared with the other scales, suggesting that they still felt they had a way to go to improve the school's leadership practices in relation to Māori educational success.

Figure 3 Māori success—principal views 2009 and 2010

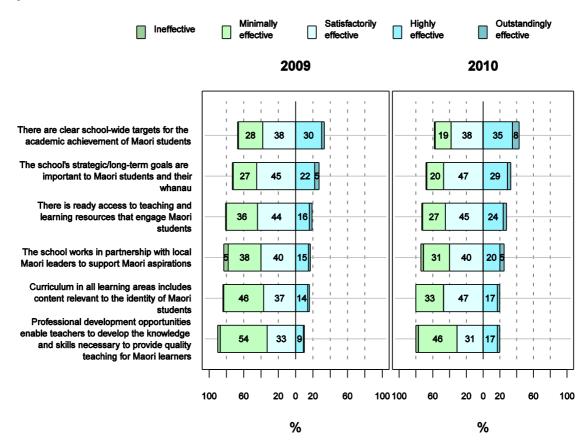


School responses

As with the principals, staff gave their lowest ratings to the items in this scale. However, staff ratings also improved most of any of the scales between 2009 and 2010, with an effect size of 0.29 (confidence interval from 0.1 to 0.4).

The item where staff felt leadership performance was best was in relation to setting targets for Māori students' achievement. Thirty-three percent agreed or strongly agreed that this was highly or outstandingly effective in 2009, and this increased to 43 percent by 2010. Professional development opportunities so teachers could be more effective with Māori students had also improved, with 20 percent of schools now rating these as highly or outstandingly effective, compared with 9 percent in 2009. Improvements were less marked for the other items, however, and clearly even with these positive shifts, there is considerable progress yet to be made.

Figure 4 Māori student success subscale—schools



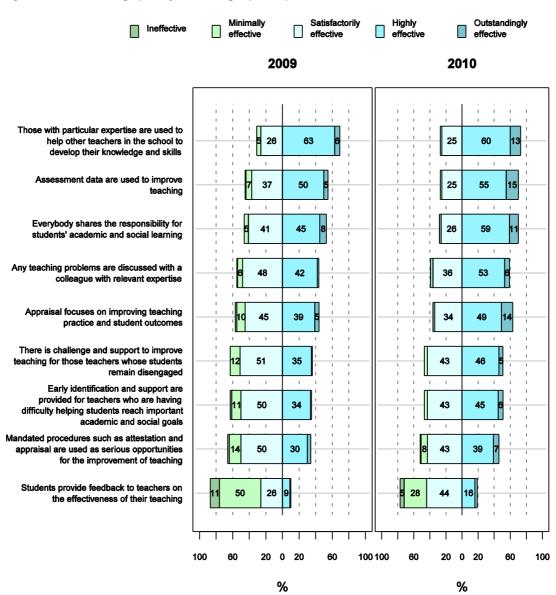
Ensuring quality teaching

Principal responses

Principal views of the effectiveness of their school leadership in ensuring the quality of teaching showed a significant shift between 2009 and 2010 with an effect size of 0.63 (confidence interval of 0.5 to 0.8). This was similar to the shift in ensuring curriculum quality.

The largest shift was in the use of appraisal to focus on improving teaching practices and student outcomes (an increase of 19 percent of principals giving their school leadership a highly or outstandingly effective rating, from 44 percent in 2009 to 63 percent in 2010). Least changed were principal views of the school leadership effectiveness in ensuring that "those with particular expertise are used to help other teachers in the school develop their knowledge and skills" (an increase of 4 percent, from 69 percent in 2009 to 73 percent in 2010).

Figure 5 Ensuring quality teaching—principal views 2009 and 2010



The effectiveness of leadership in ensuring the quality of teaching shifted less in teacher views than in relation to ensuring the quality of curriculum, with a nonsignificant effect size of 0.09 (confidence interval -0.1 to 0.3). Five of the nine items on the scale stayed static, or showed a slight decrease (though this would not be statistically significant). The item that did show positive change was an increase of 7 percent on school ratings of their school leadership as highly or outstandingly effective in ensuring that "there is challenge and support to improve teaching for those teachers whose students remain disengaged".

Outstandingly Minimally Satisfactorily Highly effective effective effective effective 2009 2010 Everybody shares the responsibility for 30 students' academic and social learning Assessment data are used to improve 35 47 56 teaching Those with particular expertise are used to help other teachers in the school to 32 51 32 48 develop their knowledge and skills Appraisal focuses on improving teaching 32 47 25 53 practice and student outcomes Any teaching problems are discussed with a 37 34 50 colleague with relevant expertise Mandated procedures such as attestation and appraisal are used as serious opportunities 41 35 41 for the improvement of teaching Early identification and support are provided for teachers who are having 23 25 50 21 46 27 difficulty helping students reach important academic and social goals There is challenge and support to improve 22 52 24 46 30 teaching for those teachers whose students remain disengaged Students provide feedback to teachers on 28 29 the effectiveness of their teaching 100 100 100 60 20 0 20 0 100 % %

Figure 6 Ensuring quality teaching—school views 2009 and 2010

Teacher learning and development

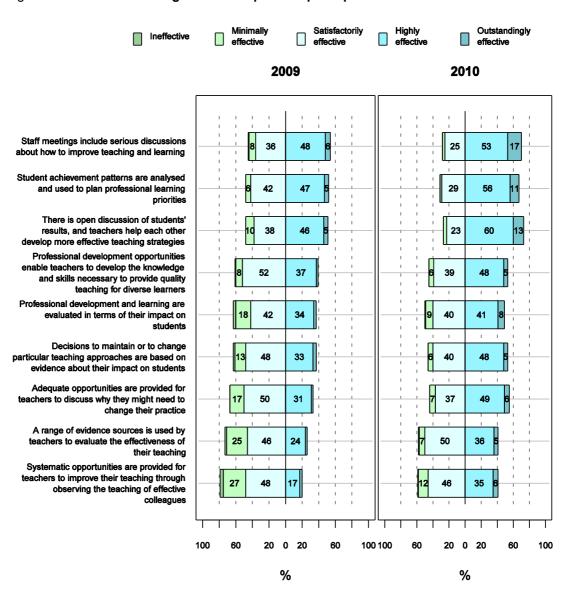
Principal responses

The largest increases in principal ratings were on this scale (effect size of 0.71, confidence interval of 0.5 to 0.8). Every item showed a marked increase in the proportion of principals rating the effectiveness of their school leadership as highly or outstandingly effective, ranging from 12 to 21 percent.

Principals' initial survey results show more confidence in effectiveness of school leadership in relation to the use of staff meetings or discussions for teacher learning, than in relation to the use of observation of others' lessons, or self-evaluation based on a

range of evidence. After participating in EPD, the greatest gains for principals' views were demonstrated in relation to these individual deliberate approaches. The greatest gains were around systematic opportunities provided for teachers to improve their teaching through observing the teaching of effective colleagues (an increase from 20 percent of principals rating the effectiveness of the school leadership team in ensuring this as highly or outstandingly effectively in 2009 to 40 percent in 2010). Another big shift was in the provision of adequate opportunities for teachers to discuss why they might need to change their practice, from 33 percent of principals rating the effectiveness of school leadership in ensuring this as highly or outstandingly effectively in 2009 to 55 percent in 2010. These shifts show a greater willingness to openly discuss individual performance and ongoing improvement. The shifts from 2009 to 2010 also show greater use of student achievement evidence as the basis for changing teaching approaches.

Figure 7 Teacher learning and development—principal views 2009 and 2010



Promoting and participating in teacher learning and development showed the third biggest shift in teacher responses, with an effect size of 0.2 (confidence interval of 0.04 to 0.4). Increases in school ratings of their school leadership as highly or outstandingly effective in ensuring good practice in this area ranged from 3 to 11 percent. The lowest shifting item was about the opportunities to observe effective colleagues' teaching (from 24 percent in 2009 to 27 percent in 2010). The highest shifting items were "professional development and learning are evaluated in terms of their impact on students", increasing from 33 percent in 2009 to 44 percent in 2010; and "decisions to maintain or change particular teaching approaches are based on evidence about their impact on students", increasing from 31 percent in 2009 to 42 percent in 2010.

Minimally Satisfactorily Highly Outstandingly Ineffective effective effective effective 2009 2010 There is open discussion of students results, and teachers help each other 31 50 30 53 13 develop more effective teaching strategies Staff meetings include serious discussions 32 21 27 45 about how to improve teaching and learning Student achievement patterns are analysed and used to plan professional learning 38 47 33 53 Professional development and learning are 18 30 37 evaluated in terms of their impact on Professional development opportunities enable teachers to develop the knowledge 18 50 29 46 36 and skills necessary to provide quality teaching for diverse learners Decisions to maintain or to change 19 29 46 37 particular teaching approaches are based on 48 evidence about their impact on students Adequate opportunities are provided for teachers to discuss why they might need to 19 48 28 15 43 35 change their practice A range of evidence sources is used by 21 23 teachers to evaluate the effectiveness of 53 34 Systematic opportunities are provided for teachers to improve their teaching through 40 20 33 39 36 observing the teaching of effective colleagues 100 60 20 0 20 60 100 100 60 20 0 20 60 100 % %

Teacher learning and development—school views 2009 and 2010

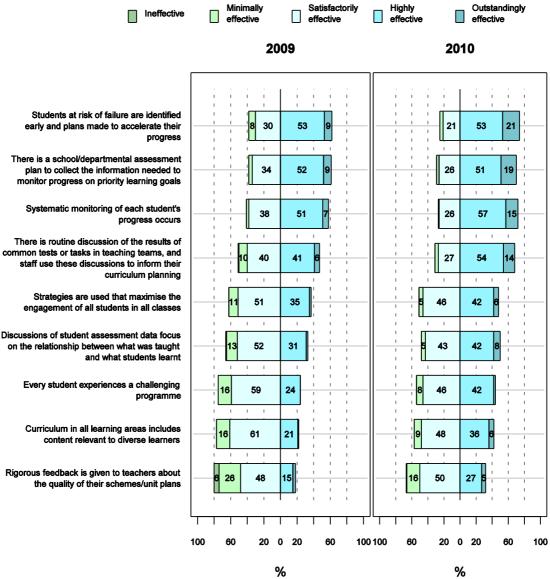
Ensuring curriculum quality

Principal responses

Ensuring curriculum quality was one of the areas where the greatest shifts were seen, with an effect size of 0.68 (confidence interval of 0.5 to 0.8).

The biggest positive shifts were mostly in the three lowest ranking items, and all those items were relevant to the professional development programme. In 2009, only 25 percent of principals thought that school leadership was highly or outstandingly effective in ensuring that every student experiences a challenging programme. This increased to 45 percent in 2010. Ensuring that curriculum in all learning areas includes content relevant to diverse learners was rated as highly or outstandingly effective by 23 percent of principals in 2009, increasing to 43 percent in 2010. The success of school leadership in ensuring the provision of rigorous feedback to teachers about the quality of their schemes/unit plans increased from 18 percent considering it highly or outstandingly effective in 2009 to 31 percent in 2010. Similarly, 47 percent of principals rated ensuring that there was routine discussion of the results of common tests or tasks in teaching teams, and staff use these discussions to inform their curriculum planning as highly or outstandingly effective in 2009, but this increased to 68 percent in 2010. This increase is important in ensuring that assessment information is used effectively to continually improve teaching practice and learning outcomes.

Figure 9 Ensuring curriculum quality—principal views 2009 and 2010



Teaching staff indicated some small positive shifts in relation to the effectiveness of their school leadership in ensuring curriculum quality, with an effect size of 0.17 (confidence interval of 0.003 to 0.3). The biggest shifts occurred for the items "discussions of student assessment data focus on the relationship between what was taught and what the students learnt" (a shift of 10 percent identifying highly or outstanding effective leadership in ensuring this, from 46 percent in 2009 to 56 percent in 2010); "every student experiences a challenging programme" (a shift of 9 percent in the same ratings, from 38 percent in 2009 to 47 percent in 2010), and "there is routine discussion of the results of common tests or tasks in teaching teams, and staff use these discussions to

inform their curriculum planning" (a shift of 9 percent from 60 percent in 2009 to 69 percent in 2010).

Minimally Satisfactorily Highly Outstandingly Ineffective effective effective effective effective 2009 2010 Systematic monitoring of each student's 23 59 15 22 23 progress occurs There is a school/departmental assessment 27 plan to collect the information needed to monitor progress on priority learning goals There is routine discussion of the results of common tests or tasks in teaching teams, and 34 48 26 56 staff use these discussions to inform their curriculum planning Students at risk of failure are identified 18 26 28 early and plans made to accelerate their 49 47 progress Strategies are used that maximise the 47 41 42 46 engagement of all students in all classes Discussions of student assessment data focus on the relationship between what was taught 43 40 35 49 and what students learnt Every student experiences a challenging 51 35 41 programme Curriculum in all learning areas includes 53 31 54 35 content relevant to diverse learners Rigorous feedback is given to teachers about 43 38 41 32 22 the quality of their schemes/unit plans 100 100 100 60 0 60 60 20 0 20 60 100 20 20 % %

Figure 10 Ensuring curriculum quality—school views 2009 and 2010

Family/whānau and community connections

Principal responses

There was a significant shift in principals' views of the effectiveness of school leadership in relation to ensuring educationally powerful connections with families, whānau and community, with an effect size of 0.61 (confidence interval of 0.5 to 0.8). There was an increase of 12 percent of principals rating their school leadership as highly or outstandingly effective in ensuring that class programmes were discussed with parents

so that parents understood what their child was being taught. This went from 39 percent in 2009 to 51 percent in 2010, to an increase of 28 percent, for the item "the school provides parents with opportunities to learn how to support their child's school learning", from 31 percent in 2009 to 59 percent in 2010.

Minimally Satisfactorily Highly Outstandingly | Ineffective effective effective 2009 2010 School/community relations are focused on 43 43 30 enhancing educational outcomes for students Staff are responsive to families' views 45 about their child's learning needs There are systematic processes for gaining parent and community feedback about the 53 35 37 50 Class programmes are discussed with parents so that parents understand what their child 48 36 39 42 is being taught Accurate information about school academic and social learning performance is 50 35 available to the community The school provides parents with 27 30 50 opportunities to learn how to support their child's school learning Parents understand the achievement levels of their children in relation to national 25 36 benchmarks 100 60 20 0 60 100 100 60 20 0 20 60 100 % %

Figure 11 Family/whānau and community connections—principal views 2009 and 2010

School responses

Ensuring educationally powerful connections with families, whānau and community had the second largest increase in school views of the effectiveness of school leadership asked about from 2009 to 2010, with an effect size of 0.23 (confidence interval of 0.1 to 0.4).

Most of this increase appears to come from a large positive shift in the item "parents understand the achievement levels of their children in relation to national benchmarks". In 2009, 27 percent of schools rated their school leadership as highly or outstandingly effective in ensuring this, and in 2010—the first year of National Standards—this rose to 46 percent.

There were also some increases in the proportion of schools rating their school leadership as highly or outstandingly effective in relation to providing parents with opportunities to learn how to support their child's learning (an increase of 9 percent, from 47 percent in 2009 to 56 percent in 2010), and in relation to discussion of class programmes with parents so parents understood what their child was being taught (an increase of 7 percent, from 46 percent in 2009 to 53 percent in 2010).

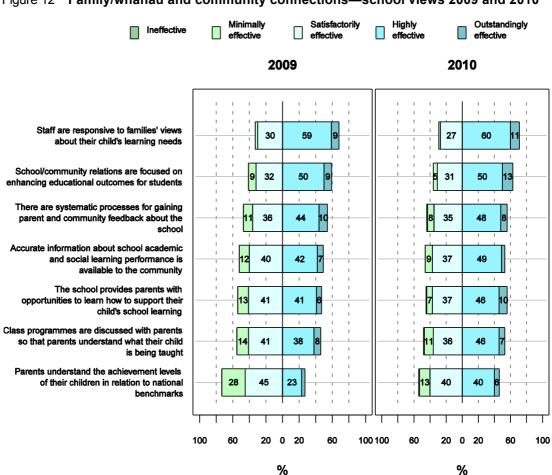


Figure 12 Family/whānau and community connections—school views 2009 and 2010

Goal setting

Principal responses

Goal setting was an area where significant gains were seen for principals between 2009 and 2010, with an effect size of 0.6 (confidence interval 0.5 to 0.8). The item with the biggest positive shift was in relation to setting challenging goals for each student's learning, doubling from 23 percent of principals' responses rating the school leadership's effectiveness in ensuring that this was happening at the high or outstanding level in 2009 to 48 percent in 2010. The smallest shift was in relation to ensuring an honest nonblaming evaluation of progress towards school targets for student learning (from 54 percent giving a highly or outstandingly effective rating in 2009 to 60 percent in 2010).

Satisfactorily Minimally Highly Outstandingly ☐ No response effective effective effective effective 2009 2010 School targets are based on information about 32 23 what students currently know and are able to School targets promote high standards and 37 51 23 21 expectations for all students Everyone is expected to teach in ways that ensure that students at risk of academic 37 50 30 53 15 failure catch up The school's strategic/long-term goals 48 30 62 promote high standards and expectations for 42 all students Everyone has high expectations for the 33 39 16 learning of all their students There is honest nonblaming evaluation of progress towards school targets for student 39 46 36 48 All the staff are fully aware of the targets 37 in the school's annual plan that are relevant 42 34 46 to their area of responsibility The school's strategic/long-term goals are 51 36 40 51 communicated in clear, concrete terms Challenging (stretch) learning goals are set 21 for each student 100 60 20 0 20 60 100 100 60 20 0 20 100

Figure 13 Goal setting—principal views 2009 and 2010

While goal setting was an area of significant improvement in the principals' responses, it changed less in staff perspectives (an effect size of 0.12; confidence interval -0.01 to 0.3) in staff responses. Schools had been much more positive about the items in this scale in 2009 than principals. This area was rated fairly highly by teachers in both 2009 and 2010, with 77 percent and 81 percent respectively considering school leadership here to be highly or outstandingly effective overall. Some items were less likely to receive these ratings though. Teachers were much more likely to think that their school leadership was highly or outstandingly effective in ensuring that everyone had high expectations for the learning of all their students (77 percent), than in ensuring that challenging learning goals were set for each student (50 percent). However, the latter item was one of three where

%

%

there were improved ratings of 7 to 8 percent since 2009. The other two were teachers being expected to teach in ways that ensure students at risk of academic failure catch up, and that there is honest nonblaming evaluation of progress towards school targets for student learning.

Satisfactorily Highly Outstandingly Ineffective effective effective effective effective 2009 2010 School targets promote high standards and 23 27 expectations for all students Everyone has high expectations for the 21 20 51 26 56 21 learning of all their students School targets are based on information about what students currently know and are 21 57 19 18 58 21 The school's strategic/long-term goals promote high standards and expectations for 21 64 62 all students Everyone is expected to teach in ways that 52 25 15 ensure that students at risk of academic 30 56 failure catch up The school's strategic/long-term goals are 31 52 27 58 communicated in clear, concrete terms All the staff are fully aware of the targets in the school's annual plan that 37 45 36 46 are relevant to their area of There is honest nonblaming evaluation of progress towards school targets for student 38 40 learning Challenging (stretch) learning goals are 41 38 38 46 set for each student 100 100 100 100 60 20 0 20 60 60 20 0 20 60 % %

Figure 14 Goal setting—school views 2009 and 2010

Strategic resourcing

Principal responses

Strategic resourcing showed a significant shift (effect size 0.55, with confidence interval 0.4 to 0.7). The item that showed the most gain in highly or outstandingly effective school leadership was "school routines maximise all students' opportunities to learn", an increase of 18 percent, to 68 percent. Around a third of the principals were now giving

high or outstandingly effective ratings to leadership work related to the development of home–school partnerships to support learning, and the use of family/community expertise to support the school's goals.

Minimally Satisfactorily Highly Outstandingly Ineffective effective effective effective effective 2009 2010 Students at risk of failure get additional 27 53 23 51 23 high-quality opportunities to learn The timetable reflects the school's 30 52 19 62 17 priorities for teaching and learning There is ready access to teaching and learning resources that engage students at 36 51 27 57 risk of failure Effective teaching resources aligned to 29 43 48 58 school goals are readily available School routines maximise all students' 13 42 45 31 54 opportunities to learn Resources are allocated to support the 26 20 47 29 development of school-home partnerships 16 48 that serve student learning The expertise of families/community is used in ways that serve the school's priority 28 18 21 44 26 learning goals 100 60 20 0 20 60 100 100 60 20 0 20 60 100 % %

Figure 15 Strategic resourcing—principal views 2009 and 2010

School responses

Staff rated the effectiveness of school leadership in strategic resourcing less highly than goal setting in both 2009 and 2010, with some small positive shifts (effect size 0.12, confidence interval of -0.04 to 0.3). The item that showed the most increase was "there is ready access to teaching and learning resources that engage students at risk of failure" (an increase of 9 percent giving school leadership ratings of highly or outstandingly effective, from 39 percent in 2009 to 49 percent in 2010). The item that showed the least shift was "students at risk of failure get additional high-quality opportunities to learn" (an increase of 1 percent, from 61 percent in 2009 to 62 percent in 2010).

Highly Minimally Satisfactorily Outstandingly ☐ Ineffective effective effective effective effective 2009 2010 The timetable reflects the school's 29 53 27 16 53 priorities for teaching and learning Students at risk of failure get additional 29 47 32 44 18 high-quality opportunities to learn School routines maximise all students 33 53 28 opportunities to learn Effective teaching resources aligned to 36 school goals are readily available There is ready access to teaching and 33 43 learning resources that engage students at 45 The expertise of families/community is used in ways that serve the school's priority 26 45 22 45 31 learning goals Resources are allocated to support the development of school-home partnerships 29 46 20 48 26 that serve student learning 60 0 20 60 100 100 0 20 100 100 20 60 20 60 % %

Figure 16 Strategic resourcing—school views 2009 and 2010

Safe and orderly environment

Principal responses

The vast majority of principals in 2009 (78 percent) thought that leadership practices were effective in ensuring that their staff worked in a safe, supportive and orderly environment. This stayed much the same in 2010, at 80 percent. Overall, this area showed the least change between 2009 and 2010 apart from the leadership context, with a low effect size of 0.28 (confidence interval of 0.1 to 0.4).

Items on this scale did shift upwards in terms of the proportion of principals rating the school leadership as highly or outstandingly effective, with a range of increases from 2 percent (in relation to the already highly rated item "staff work in a safe, supportive, and orderly environment"), to 14 percent. The biggest change was in relation to the item "timely support with student behaviour issues is given to staff", an increase from 67 percent in 2009 to 81 percent in 2010, closely followed by the item "student views about the school culture and how to improve it are taken seriously", which increased from 41 percent of principals in 2009 to 54 percent in 2010.

Satisfactorily Outstandingly Minimally Highly Ineffective effective effective effective effective Staff work in a safe, supportive and orderly environment The school is a positive environment in which student learning is the central focus Staff views about the school culture and how to improve it are taken seriously Problems between teachers and students are resolved in a fair and timely way Problems between teachers and parents are resolved in a fair and timely way The school is a positive environment for everyone, whatever their culture There is a consistent school-wide approach to student behaviour management Timely support with student behaviour issues is given to staff There is regular monitoring of the extent to which students feel safe at school Student views about the school culture and how to improve it are taken seriously 100 100 % %

Figure 17 Safe and orderly environment—principal views 2009 and 2010

The effectiveness of leadership in this area was generally highly rated by teachers, with the vast majority considering that their school was a positive environment for all. At the scale level, this view largely did not change between 2009 and 2010 (nonsignificant effect size of 0.04, confidence interval of -0.13 to 0.2). However, there were some changes in individual items.

Interestingly, the proportion of schools where teachers gave high ratings to the effectiveness of their school leadership in ensuring they worked in a safe, supportive and orderly environment actually dropped between 2009 and 2010 from 78 percent to 71 percent (giving high or outstandingly effective ratings). The only notable gain was seen in the second lowest ranked item around student views about the school culture and how to improve it being taken seriously. In 2009, teachers in only 48 percent of schools thought

their school leadership was highly or outstandingly effective in ensuring this, increasing to 53 percent in 2010.

Minimally Satisfactorily Outstandingly Highly | Ineffective effective effective effective effective 2009 2010 The school is a positive environment in 16 43 38 17 43 37 which student learning is the central focus The school is a positive environment for 30 48 20 46 31 everyone, whatever their culture Staff work in a safe, supportive and 28 24 28 orderly environment Problems between teachers and parents are 24 54 17 27 49 21 resolved in a fair and timely way Problems between teachers and students are 8 24 18 21 24 51 47 resolved in a fair and timely way There is a consistent school-wide approach 18 22 40 20 27 38 20 to student behaviour management Staff views about the school culture and 30 43 26 42 18 how to improve it are taken seriously Timely support with student behaviour 31 42 16 40 15 issues is given to staff Student views about the school culture and 17 35 37 16 32 46 how to improve it are taken seriously There is regular monitoring of the extent 39 to which students feel safe at school 100 60 20 0 20 100 100 60 20 0 20 100 60 60 % %

Figure 18 Safe and orderly environment—school views 2009 and 2010

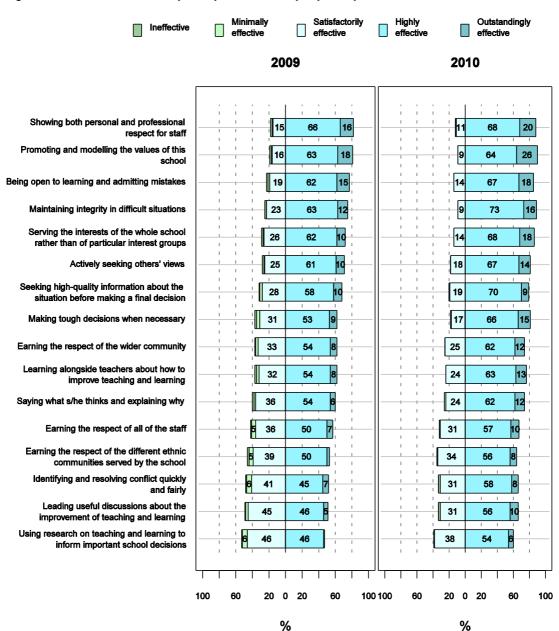
Effectiveness of principal leadership

Principal responses

Principals' evaluation of their own leadership effectiveness showed significant gains from 2009 to 2010, but the gains (0.44 effect size, confidence interval of 0.3 to 0.6) were less than for the other ELP aspects. This probably reflects the focus of the EPD on school practices rather than the principal themselves. There was no change in principals' views of their effectiveness when it comes to openness to learning and making mistakes. All the other items in this scale shifted upwards, ranging from an increase of 5 percent in the proportion choosing a rating of highly or outstandingly effective for the item "showing

both personal and professional respect for staff" to an increase of 20 percent for the item "making tough decisions when necessary". This capability would have been called for in some of the EPD work; it may also have been enhanced by schools responding to the introduction of the National Standards and the stronger emphasis on Māori and Pasifika student progress. The other highest moving items can also be seen to have links to both the wider policy context of 2010, and the EPD programme: "leading useful discussions about the improvement of teaching and learning", "maintaining integrity in difficult situations" and "learning alongside teachers about how to improve teaching and learning".

Figure 19 Effectiveness of principal leadership—principal views 2009 and 2010



Overall, most schools rated their principal's personal leadership highly or outstandingly effective both before and at the end of EPD. There was a significant gain on the scale, but the effect size was minimal, -0.07 (confidence interval of -0.22 to 0.08). Shifts were very low, most between 2 to 4 percent. However, one item showed a slight decrease, and a rather puzzling one given the focus of the EPD: "learning alongside teachers about how to improve teaching and learning", which decreased 6 percent from 68 to 62 percent of schools giving their principal highly or outstandingly effective ratings.

Minimally Satisfactorily Highly Outstandingly | Ineffective effective effective effective 2009 2010 Promoting and modelling the values of this 43 39 42 41 school Maintaining integrity in difficult situations 47 34 44 38 Showing both personal and professional 46 33 37 respect for staff Making tough decisions when necessary 6 15 44 34 39 40 Saying what s/he thinks and explaining why 6 16 26 33 51 46 Earning the respect of the wider community 7 16 45 46 30 33 Serving the interests of the whole school 7 19 7 18 53 22 51 23 rather than of particular interest groups Using research on teaching and learning to 5 21 19 22 25 54 49 inform important school decisions Earning the respect of the different ethnic 7 20 5 20 20 50 25 communities served by the school Being open to learning and admitting mistakes 10 19 49 21 7 20 50 22 Seeking high-quality information about the 6 20 26 25 49 25 44 situation before making a final decision Leading useful discussions about the 9 20 8 18 46 48 23 26 improvement of teaching and learning 10 20 7 24 Actively seeking others' views 49 19 47 21 Learning alongside teachers about how to 17 23 9 22 51 9 19 50 improve teaching and learning Earning the respect of all of the staff 12 20 27 27 Identifying and resolving conflict quickly 12 26 45 17 13 22 45 20 and fairly 100 100 100 60 20 0 20 60 20 0 20 100

Figure 20 Effectiveness of principal leadership—school views 2009 and 2010

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Pedagogical leadership contexts

Principal responses

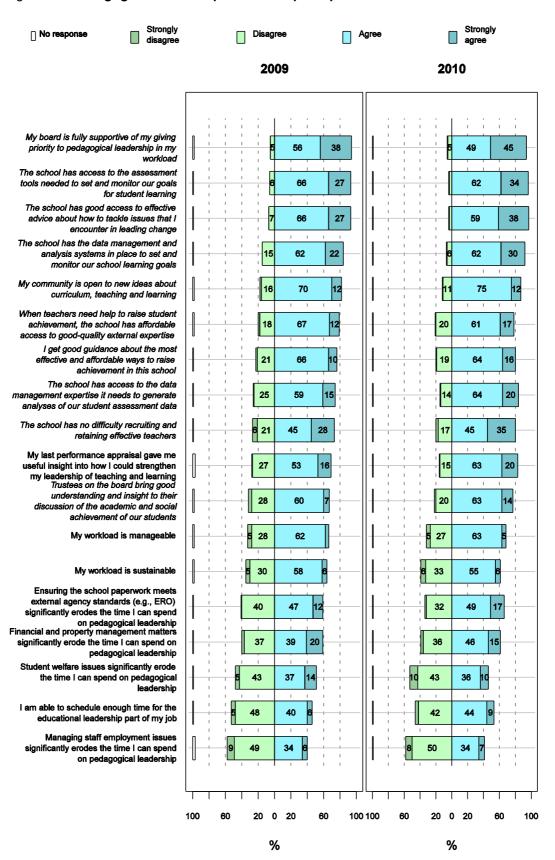
The pedagogical leadership context scale asked principals about aspects related to support for their role as educational leader, and the constraints on focusing on educational leadership. In Figure 21, the items related to support are italicised. One item, the experience of useful performance appraisal, belonged to neither the support or constraints factors.

Overall, principals' rating of the support for their role increased somewhat (a significant effect size of 0.23, confidence interval of 0.1 to 0.4) between 2009 and 2010. There was no change in their overall ratings of the barriers or constraints for their role; however, there was an increase of 8 percent in the proportion who agreed or strongly agreed that "I am able to schedule enough time for the educational leadership part of my job". This increased from 46 percent in 2009 to 54 percent in 2010.

Three other items increased by 9 to 10 percent, to do with data management, and trustee knowledge related to student achievement. Principals' confidence that their school had the data management and analysis systems in place to set and monitor school learning goals increased from 84 to 93 percent. They were also more confident that their school had access to the data management expertise it needed to generate analyses of their student achievement data, an increase from 75 to 85 percent. Seventy-six percent agreed or strongly agreed in 2010 that their school had trustees on its board who brought good understanding and insight to their discussion of the academic and social achievement of the school's students, up from 66 percent in 2009.

The item with the largest increase, however, of 15 percent, was in relation to having useful performance appraisal that gave insights for the principal to strengthen the leadership of teaching and learning. This may indicate that some principals had gained an appreciation of the importance of having such a process.

Figure 21 Pedagogical leadership contexts—principal views 2009 and 2010



5. Patterns of growth

Was there improvement in perceptions of school leadership effectiveness?

The short answer is, yes. It appears that there was some marked growth between 2009 to 2010, in principal and to a lesser extent teacher perceptions of the effectiveness of school leadership in ensuring that the educational practices, linked with gains for student achievement, that were included in the ELP survey, were occurring in the schools that took part in the EPD programme.

There is evidence of "growth"—positive shifts—from 2009 to 2010, in almost all the aspects rated by the principals participating in the EPD programme. The effect sizes were mostly moderate (between 0.55 to 0.71), with low to moderate effect sizes in relation to shifts on ensuring a safe and orderly environment, and support for pedagogical leadership. These positive shifts occurred even though perception of workload and constraints on principal time for pedagogical leadership from the other aspects of their role remained static. Thus these changes do not seem to have occurred from working "harder" rather than "differently".

A similar pattern of shifts, but with much smaller effect sizes, was found when aggregating teacher responses at the school level. Some of the small positive shifts were not statistically significant. However, as there were multiple teacher measures per school and we were unable to match teachers between years, as we could with principals, we could not incorporate any measure of this variability in our analysis of the shifts.

In 2009 the schools' responses (teachers' responses) at the aggregate level (looking at all the schools in this group of 191) gave higher ratings to the effectiveness of school leadership performance than did the principals at the aggregate level. In 2010 there is little difference between the schools' ratings and the principals' ratings, at this aggregate level. The principals' scores have risen to almost match the schools' scores. Thus principals seemed more aware of educational leadership practices. This may mean that it takes time for the EPD programme work to be experienced by teachers across a school, depending on its nature. Another possible interpretation is that many of the principals were more critical in their ratings than their teachers in 2009, but may have gained more confidence through their participation in the EPD programme, with the opportunity to gain more knowledge about effective school leadership practices and compare what they were doing with others. We do not know from the ELP survey data alone what changes principals actually made in their schools, to be able to see how different degrees of shift were related to any changes in practice. However, while it may take longer for teachers

in a school to be aware of changes (some of which may affect some teachers in the short term more than others), teachers in schools whose principals gave the lowest ratings in 2009 showed greater shifts on the whole than the overall shifts for other schools, indicating that there were changes evident to teachers as well as principals.

Exploratory plots of the 2009 scores against the 2010 scores, ¹² and of the 2009 scores against the growth scores (shifts) between 2009 and 2010 indicated that for both principals' and school scores, the greater growth was shown for those with the lowest starting scores (below the mean). However, the *variability* in growth scores was about the same for those with low initial scores and for those with high initial scores. This means that not *every* school or principal with a high score in 2009 had less growth, or that every low-scoring school or principal had higher growth.

Patterns of shift on the overall ELP scale—principals

Overall, 31 percent of principals showed negligible change on their overall ratings of their school's leadership (change in scale score of up to 1.5), 19 percent showed shifts of 1.6 to 4.9, 16 percent showed shifts of 5 to 9, 13 percent showed shifts of 9.1 to 13.9 and 19 percent, shifts of 14 or more on the scale. Greater shifts were evident for the principals whose ratings of their school's leadership effectiveness had been in the lowest quartile in 2009. Thirty-six percent of these principals increased their overall scale scores by 14 or more. Only 12 percent of this group's overall scale scores showed negligible growth. This may indicate the usefulness of the ELP survey results for this group in particular in 2009, when used for needs analysis alongside other school information.

On the 1–5 scales we used for the Māori success scale and the principal leadership scale, a shift of 0.5 or more (probably enough to move a rating up a level) occurred in 29 percent of the principal ratings for Māori success, and a shift of 0.31 to 0.5 for 21 percent. Twenty percent of principals' ratings of their own leadership increased by 0.51 or more, and by 0.31 to 0.5 for 16 percent. This suggests that a reasonable minority of principals considered that their effectiveness was significantly better in 2010 than in 2009.

Some school characteristics were related to different sized growth on principal scores on the overall ELP scale. Only primary schools showed overall gains of 14 scale points or more. Almost two-thirds of the deciles 1–2 schools' overall scores showed negligible change (65 percent). Thirty-one percent of deciles 9–10 schools showed little change. There was no relationship with whether principals had identified an issue or experience that had made it difficult to maintain their intended EPD focus. Our question about this may have been too general to identify major issues however.

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¹² "Scatter plots" of 2009 scores against 2010 scores.

Secondary and composite schools were more likely to have been in the group of the 2009 lowest scoring schools, as were deciles 1–2 schools. Proportion of Māori enrolment was not related to initial score. Secondary schools in this group were less likely to make marked gains of more than 9 percent (23 percent cf. 50 percent of the primary schools). Deciles 1–4 schools were less likely to make gains of 9 percent or more than deciles 7–10 schools (17 percent cf. 64 percent).

Patterns of school shifts

Overall, 50 percent of schools showed negligible change on their scoring on the overall ELP scale ratings, 26 percent showed shifts of 1.6 to 4.9 scale score units, 14 percent showed shifts of 5 to 9, 7 percent showed shifts of 9.1 to 13.9 and 3 percent, shifts of 14 scale score units or more. Schools with the lowest scores on the overall scale (using the principal's ratings) in 2009 showed greater shifts than others with 35 percent increasing the overall scale score by 5 percent or more cf. 19 percent of other schools.

As one might expect, school characteristics showed similar links with the patterns of shifts on the overall scale for schools as they had with the patterns of shifts on the overall scale for principals. Only primary schools increased the overall scale score by 9 scale score units or more. There was no link with decile. Of the low-rating schools in 2009, most of those that increased their overall scale score by 9 scale score units or more had more than 30 percent Māori enrolment. Half were deciles 1–2 schools.

School rating shifts of more than 0.5 (probably enough to move a rating up a level) occurred in 15 percent of the school ratings for Māori success, and a shift of 0.31 to 0.5 for 17 percent. Only 5 percent of the (personal) principal leadership ratings at the school level shifted as much, indicating that staff may be more likely as a whole to be aware of changes in process.

Patterns of growth for the lowest rating schools in 2009

Table 9 gives more detail on the growth shown on the ELP by the 49 principals whose ratings of their school's leadership effectiveness in ensuring good practices linked to positive outcomes for students were in the lowest quartile of the overall ELP scale in 2009. Here we focus on the 21 lowest rated items in 2009, for these principals. The 2009 mean rating for this group of principals and their schools (aggregate teachers) is given (on the 1–5 scale used for the items, where 2 is minimally effective and 3 is satisfactorily effective). None of the principal mean ratings reached the "satisfactorily effective" level in 2009; in 2010, 14 of the 21 items would have been at this level. Their teachers tended to be more sanguine in their ratings. In 2009, six of these items would have been at the "satisfactorily effective" level for these schools. In 2010, 17 would have made that level.

The effect sizes of the growth are also given. The columns headed "Growth" give the difference on this 5-point scale between the 2009 and 2010 ratings for growth. These differences show whether the 2010 rating would have reached the next category of effectiveness or not. Also given is the effect size of the growth. The data are sorted from the item rated lowest by principals to the item with the highest rating (which is still 16th lowest overall).

Table 9 **Growth in item ratings 2009–10 for principals and their schools, for principals** who gave lowest ratings in 2009 (*n*=49)

| Item question | | Principals | | | Schools | |
|---|--------------|------------|----------------|--------------|---------|----------------|
| | 2009 Mean | Growth | Effect size | 2009 Mean | Growth | Effect size |
| Students provide feedback to teachers on the effectiveness of their teaching | 1.98 | 0.90 | 1.12 | 2.61 | 0.16 | 0.33 |
| Rigorous feedback is given to teachers about the quality of their schemes/unit plans | 2.13 | 0.73 | 0.91 | 2.80 | 0.11 | 0.22 |
| Professional development opportunities enable teachers to develop the knowledge and skills necessary to provide quality teaching for Māori learners | 2.22 | 0.50 | 0.63 | 2.64 | 0.14 | 0.28 |
| Systematic opportunities are provided for teachers to improve their teaching through observing the teaching of effective colleagues | 2.27 | 0.90 | 1.12 | 2.86 | 0.14 | 0.28 |
| A range of evidence sources is used by teachers to evaluate the effectiveness of their teaching | 2.30 | 0.79 | 0.98 | 2.98 | 0.21 | 0.42 |
| The school works in partnership with local Māori leaders to support Māori aspirations | 2.35 | 0.47 | 0.59 | 2.89 | 0.16 | 0.32 |
| The expertise of families/community is used in ways that serve the school's priority learning goals | 2.37 | 0.37 | 0.46 | 2.83 | 0.18 | 0.37 |
| Curriculum in all learning areas includes content relevant to the identity of Māori students | 2.38 | 0.38 | 0.48 | 2.76 | 0.15 | 0.30 |
| Challenging (stretch) learning goals are set for each student | 2.39 | 0.69 | 0.87 | 3.07 | 0.18 | 0.35 |
| Parents understand the achievement levels of their children in relation to national benchmarks | 2.43 | 0.67 | 0.84 | 2.89 | 0.30 | 0.61 |
| Professional development and learning are evaluated in terms of their impact on students | 2.49 | 0.69 | 0.87 | 3.07 | 0.20 | 0.41 |
| Resources are allocated to support the development of school-home partnerships that serve student learning | 2.50 | 0.31 | 0.39 | 2.85 | 0.20 | 0.40 |
| The school's strategic/long-term goals are important to Māori students and their whānau | 2.52 | 0.49 | 0.61 | 2.96 | 0.18 | 0.36 |
| Early identification and support are provided for teachers who are having difficulty helping students reach important academic and social goals* | 2.53 | 0.76 | 0.94 | 2.91 | 0.15 | 0.31 |
| Every student experiences a challenging programme | 2.53 | 0.48 | 0.60 | 3.14 | 0.05 | 0.10 |
| There are clear school-wide targets for the academic achievement of Māori students | 2.55 | 0.52 | 0.65 | 2.96 | 0.18 | 0.36 |

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¹³ Effect size calculations used standard deviations of 0.8 for principals' scores and 0.5 for those of whole schools.

| There is ready access to teaching and learning resources that engage Māori students | 2.57 | 0.43 | 0.53 | 2.82 | 0.24 | 0.49 |
|--|------|------|------|------|------|------|
| Mandated procedures such as attestation and appraisal are used as serious opportunities for the improvement of teaching* | 2.57 | 0.61 | 0.77 | 3.16 | 0.16 | 0.31 |
| Adequate opportunities are provided for teachers to discuss why they might need to change their practice | 2.61 | 0.67 | 0.83 | 3.05 | 0.18 | 0.36 |
| Decisions to maintain or to change particular teaching approaches are based on evidence about their impact on students* | 2.63 | 0.62 | 0.77 | 3.07 | 0.19 | 0.37 |
| There is challenge and support to improve teaching for those teachers whose students remain disengaged* | 2.63 | 0.49 | 0.61 | 2.97 | 0.15 | 0.29 |

^{*} Item not in 0.

The gains indicated from these principals' responses are very high compared with those of principals overall (see Table 10), suggesting above average shifts in their perception of the effectiveness of school leadership. The lowest shifts for these principals were around having resources and curriculum content to engage Māori students and support their identity, and building home—school partnerships and using family/community expertise to support learning, with effect sizes of 0.39 to 0.53. The most growth was evident in relation to the use of feedback in the school, more opportunities for teachers to learn from observing effective colleagues, early identification and support for teachers having difficulty helping their students reach goals and setting challenging goals for students.

Overall, the items rated lowest by *all* principals in 2009 were those regarding teaching and learning related to Māori students, feedback to teachers and evaluation of effectiveness of teaching and professional development and parent understanding of their child's performance in relation to national benchmarks, and how to support their child's learning. Table 10 below sets out the 20 lowest rating items for all principals in 2009, using the same approach as in Table 9.^{14,15} The data are sorted from the item rated lowest by principals to the item with the highest rating (which is still 20th lowest overall). The five items with positive shifts with an effect size of 0.5 are italicised. Seven items (shaded) had a positive shift with effect sizes of about 0.4. Thus 12 of the 20 items showed at least moderate shifts. By comparison, in Table 9, for the initially low-rating schools only, 19 items would have been italicised, and two would have been shaded. Half the effect sizes for the growth in school ratings are 0.2 or below when we look at all schools; compared with only one at this rate for the initially low-rating schools in 2009. This clearly shows that the greatest gains were in the schools that initially had the lowest scores.

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¹⁴ Some items in each of Table 9 and 10 are different, reflecting differences in what were the lowest rated items for the overall group, and the subset of the lowest scoring group in 2009.

Effect size calculations used standard deviations of 0.8 for principals' scores and 0.5 for those of whole schools.

Table 10 Shifts for the items rated lowest by principals in 2009 (n=191)

| Itam guantian | Principale Schools | | | | | | | |
|---|--------------------|------------|----------------|--------------|---------|----------------|--|--|
| Item question | 0000 | Principals | | | Schools | | | |
| | 2009 Mean | Growth | Effect size | 2009 Mean | Growth | Effect size | | |
| Students provide feedback to teachers on the effectiveness of their teaching | 2.36 | 0.48 | 0.60 | 2.72 | 0.07 | 0.15 | | |
| The school works in partnership with local Māori leaders to support Māori aspirations | 2.60 | 0.28 | 0.35 | 2.94 | 0.17 | 0.34 | | |
| Professional development opportunities enable teachers to develop the knowledge and skills necessary to provide quality teaching for Māori learners | 2.75 | 0.33 | 0.42 | 2.81 | 0.17 | 0.35 | | |
| Curriculum in all learning areas includes content relevant to the identity of Māori students | 2.82 | 0.25 | 0.31 | 2.98 | 0.16 | 0.31 | | |
| Rigorous feedback is given to teachers about the quality of their schemes/unit plans | 2.82 | 0.37 | 0.46 | 3.09 | 0.06 | 0.11 | | |
| Systematic opportunities are provided for teachers to improve their teaching through observing the teaching of effective colleagues | 2.88 | 0.47 | 0.59 | 3.12 | 0.06 | 0.11 | | |
| The expertise of families/community is used in ways that serve the school's priority learning goals | 2.89 | 0.29 | 0.36 | 3.24 | 0.06 | 0.11 | | |
| The school's strategic/long-term goals are important to Māori students and their whānau | 2.91 | 0.29 | 0.36 | 3.20 | 0.12 | 0.24 | | |
| Resources are allocated to support the development of school–home partnerships that serve student learning | 2.95 | 0.26 | 0.33 | 3.17 | 0.09 | 0.18 | | |
| A range of evidence sources is used by teachers to evaluate the effectiveness of their teaching | 2.98 | 0.43 | 0.54 | 3.24 | 0.17 | 0.34 | | |
| There are clear school-wide targets for the academic achievement of Māori students | 3.01 | 0.40 | 0.51 | 3.23 | 0.15 | 0.30 | | |
| Challenging (stretch) learning goals are set for each student | 3.02 | 0.41 | 0.51 | 3.39 | 0.10 | 0.20 | | |
| Parents understand the achievement levels of their children in relation to national benchmarks | 3.04 | 0.29 | 0.36 | 3.23 | 0.24 | 0.49 | | |
| There is ready access to teaching and learning resources that engage Māori students | 3.07 | 0.20 | 0.24 | 3.08 | 0.16 | 0.33 | | |
| Every student experiences a challenging programme | 3.08 | 0.29 | 0.36 | 3.40 | 0.05 | 0.11 | | |
| Curriculum in all learning areas includes content relevant to diverse learners* | 3.08 | 0.34 | 0.42 | 3.38 | 0.08 | 0.15 | | |
| Professional development and learning are evaluated in terms of their impact on students | 3.16 | 0.34 | 0.42 | 3.33 | 0.10 | 0.20 | | |
| Adequate opportunities are provided for teachers to discuss why they might need to change their practice | 3.17 | 0.38 | 0.47 | 3.30 | 0.10 | 0.21 | | |
| The school provides parents with opportunities to learn how to support their child's school learning* | 3.21 | 0.39 | 0.48 | 3.46 | 0.16 | 0.31 | | |
| Discussions of student assessment data focus on the relationship between what was taught and what students learnt* | 3.21 | 0.34 | 0.43 | 3.48 | 0.10 | 0.20 | | |

^{*} Item not in Table 9.

The areas in which the principals with the lowest overall ratings are least effective are also areas of least effectiveness for all principals.

Was the low ranking just a result of principals under-rating the effectiveness of leadership in their schools? This doesn't seem likely, as the staff ratings on each of the items by the 49 schools were also all lower than the overall ratings for the same items by between 0.1 and 0.4.

The effect sizes for the shifts between 2009 and 2010 for the 49 lowest ranking principals were mostly roughly double those for all principals on the same items (e.g., for the first item in each table around student feedback to teachers the effect size for the 49 principals was 1.12, for all principals was 0.6). This is also true when comparing the effect sizes for shifts in staff perceptions (e.g., for the same first item for staff the effect sizes are 0.33 and 0.15, respectively). This gives an indication that in the schools in which the principal was most aware of a lack of effective leadership there really was above average improvement in the effectiveness of leadership. It was noticed by teachers as well as by the principal.

Is the growth attributable to EPD?

A key question for this report is whether or not the principals' participation in the EPD programme led to the growth we see. It is not easy to answer this question with the survey material alone. We do not know, for example, what school leaders were also giving priority to in their planning and work within the leadership team, and the staff. We know that there were systemic priorities emphasised during 2010:

- implementation of National Standards in the primary sector in 2010 with a focus on setting targets for student achievement, and monitoring and reporting progress
- increased government focus (Ministry, ERO and Ministers) on underachieving students and groups of at-risk students, with the introduction of National Standards and ongoing work through Ka Hikitia—Managing for Success: A Māori Education Strategy 2008–2012.¹⁶

These priorities also fed into the framework for EPD, which asked providers to emphasise the goal of raising student achievement, particularly for underserved groups. Because they were part of EPD, it is difficult to separate EPD out from these wider system emphases.

If we look at the items from the principal survey which showed the largest growth in ratings of the effectiveness of the school's leadership—these are the items with effect sizes of more than 0.45—we see that many of them are about processes that increase

¹⁶ Ministry of Education (2009).

teacher inquiry, and inquiry was one of the hallmarks of EPD, through its focus on school-decided inquiry projects. These processes are largely in-school.

Table 11 Items with the biggest shifts between 2009 and 2010

| Item question | Principals' scores 2009 | Effect size |
|--|----------------------------|-------------|
| Students provide feedback to teachers on the effectiveness of their teaching | 2.36 | 0.60 |
| Systematic opportunities are provided for teachers to improve their teaching through observing the teaching of effective colleagues | 2.88 | 0.59 |
| A range of evidence sources is used by teachers to evaluate the effectiveness of their teaching | 2.98 | 0.54 |
| Challenging (stretch) learning goals are set for each student | 3.02 | 0.51 |
| Appraisal focuses on improving teaching practice and student outcomes | 3.35 | 0.51 |
| There are clear school-wide targets for the academic achievement of Māori students | 3.01 | 0.51 |
| The school provides parents with opportunities to learn how to support their child's school learning | 3.21 | 0.48 |
| Adequate opportunities are provided for teachers to discuss why they might need to change their practice | 3.17 | 0.47 |
| There is routine discussion of the results of common tests or tasks in teaching teams, and staff use these discussions to inform their curriculum planning | 3.43 | 0.47 |
| Rigorous feedback is given to teachers about the quality of their schemes/unit plans | 2.82 | 0.46 |
| There is open discussion of students' results, and teachers help each other develop more effective teaching strategies | 3.47 | 0.46 |

The greatest shifts for teachers can be related to the two major policy thrusts of 2010, which in turn were reflected in the ELP programme. When we look at the items showing the most shift in average ratings of school leadership effectiveness from teachers (effect sizes of 0.3 and above), the item which has shifted most reflects the introduction of National Standards. The item "a range of evidence sources is used by teachers to evaluate the effectiveness of their teaching" can also be related to the introduction of the National Standards, though it has wider application too. Practices related to improving Māori student success are most marked: five of the eight items here. We have included the effect sizes for principals' shifts on these items because they show some similarity with teacher shifts.

Table 12 Items with the biggest shifts rated by staff between 2009 and 2010

| Item question | Staff | scores | Principals' scores | | |
|---|-------|-------------|--------------------|-------------|--|
| | 2009 | Effect size | 2009 | Effect size | |
| Parents understand the achievement levels of their children in relation to national benchmarks | 3.23 | 0.49 | 3.04 | 0.36 | |
| Professional development opportunities enable teachers to develop the knowledge and skills necessary to provide quality teaching for Māori learners | 2.81 | 0.35 | 2.75 | 0.42 | |
| A range of evidence sources is used by teachers to evaluate the effectiveness of their teaching | 3.24 | 0.34 | 2.98 | 0.54 | |
| The school works in partnership with local Māori leaders to support Māori aspirations | 2.94 | 0.34 | 2.60 | 0.35 | |
| There is ready access to teaching and learning resources that engage Māori students | 3.08 | 0.33 | 3.07 | 0.24 | |
| Curriculum in all learning areas includes content relevant to the identity of Māori students | 2.98 | 0.31 | 2.82 | 0.31 | |
| The school provides parents with opportunities to learn how to support their child's school learning | 3.46 | 0.31 | 3.21 | 0.48 | |
| There are clear school-wide targets for the academic achievement of Māori students | 3.23 | 0.30 | 3.01 | 0.51 | |

Conclusion

EPD focused on improving the leadership capability of experienced principals through a 15-month programme of professional development based on the leadership aspects from the *School Leadership and Student Outcomes BES*, *Ka Hikitia*, and distributed leadership models. Ten providers worked with groups of principals, through a combination of shared sessions and individual support. Principals used the 2009 ELP survey findings with other school data to identify inquiry projects focused on making change to their own school's leadership practices that were linked positively with teaching and learning.

For those principals who undertook the ELP survey in both 2009 and 2010, we can see overall significant shifts across all aspects except for pedagogical context and barriers (over which principals have little control). The biggest shifts were for the lower performing principals (as measured in 2009). Within this overall positive picture, there is some variability, with little change at all evident for 31 percent of the principals on the overall scale. This lack of change at the overall level, however, does not mean that schools were not making changes on specific aspects of school leadership practices, as we see in looking at the item level.

Teachers' ratings of the effectiveness of their school's leadership shifted less markedly than did principals', but showed some increase, particularly in relation to:

- · ensuring curriculum quality
- promoting and participating in teacher learning and development
- ensuring educationally powerful connections with families, whānau and community
- Māori students' success.

These shifts in principal and school perceptions of school leadership effectiveness for the EPD schools on the whole show links with both the particular process of the EPD—the use of inquiry into school-identified issues, using data—and the two priorities in educational policy affecting schools last year, the push to improve Māori student achievement and the introduction of the National Standards.

While positive shifts were evident in many of the ELP principals and schools, levels on the scales and individual items show that there is room for further progress to be made, in working with schools to ensure that these leadership practices that are well-linked in research to positive outcomes for student learning are more widespread.

The findings of this report suggest certain factors that the Ministry of Education may like to take into account in its investment and policy decisions in its work on leadership development:

- Changes at leadership level take time to impact on actual practices within schools, particularly within secondary schools, so professional development needs to provide for longer term sustainable change.
- Those who rate as less effective gain the most, suggesting that targeting of professional development may be appropriate when access must be prioritised.
- Support for schools to develop their own capability through inquiry into their practices, using their own data, including the ELP survey, with support from outside appears to work well for many of the EPD schools., However, this approach did not make much of a difference to leadership practices for at least a third of the principals, indicating that professional development and support to improve school leadership practices may need to use a range of approaches. The Unitec evaluation of EPD may be able to shed further light here.
- A focus on leadership practices related to teacher learning, curriculum quality and goal setting may be particularly fruitful—but the fact that these focuses showed associations with larger shifts may also be due to where schools have established good bases for further development; these could well shift in the future. But if we want to build on what has been achieved, it could be well worthwhile ensuring that schools that identify needs in these areas are supported.
- Policy priorities can be threaded through professional development using inquiry models that focus on schools' own identified priorities.