

Educational Leadership Practices
Survey baseline 2009 overall profile
of schools in the
Experienced Principals'
Development programme

Report prepared for the Ministry of Education

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Executive summary

In this report, we describe the overall patterns for the 282 schools whose principals are taking part in the Experienced Principals' Development programme (EPD) and that completed the Educational Leadership Practices Survey (ELP) in October–December 2009 as part of the needs analysis for their work in 2010.

The ELP 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)*
- *Safe and Orderly Environment*
- *Educationally Powerful Connections with Families, Whānau and Community (Teaching Learning)*
- Māori Success
- Principal Leadership.

These aspects are based on the vision for educational leadership set out in the Kiwi Leadership for Principals (KLP) framework, and six dimensions for effective educational leadership practice described in the Educational Leadership Best Evidence Synthesis. The ELP's main use is for formative school development, and it includes some highly aspirational items.

The EPD schools that completed the ELP differ somewhat from the national profile of schools. They contain a higher proportion of larger schools, deciles 7–10 schools, secondary schools and schools with medium and high levels of Māori enrolment than the national profile; and fewer deciles 1–2, rural and composite schools.

The EPD was targeted towards experienced principals. The median number of years of principal experience was eight. Two percent of the EPD principals do have less than two years' experience as a principal. Thirty-six percent of the principals have completed the First-Time Principals programme.

The survey was undertaken by 4,716 teachers. The estimated school average response rate is high, suggesting that the picture we have of school perceptions of educational leadership practices in the EPD schools is pretty robust. Interestingly, in view of the focus on school leadership as a whole, more than half the teachers now have 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.

Most teachers in the EPD schools who completed the ELP survey are positive about their morale, job enjoyment and workload. Around a fifth of the teachers are not—they think their workload is unmanageable, unsustainable and unfair and, to a lesser extent, that they do not have the support they need to do their job effectively. However, the picture overall from teachers in these schools is more sanguine than the comparable picture from NZCER's national surveys, suggesting that overall the EPD schools do differ in some respects from the national picture.

Patterns of school leadership practice ratings

There was a wide range of scores on the overall leadership scale (from 33 to 88 units on the educational leadership practices scale), but half the schools scored in the band between 52 and 64 units, with the mean at 58 units. There was a high level of intercorrelation between the scores on each separate aspect and the overall leadership practices score.

Goal Setting, Safe and Orderly Environment and *Principal Leadership* were the scales that had the highest proportions of schools rating their school leadership as highly or outstandingly effective (60 percent or more). *Teacher Learning* and *Māori Success* were the scales that had the lowest proportions of schools rating their school leadership as highly or outstandingly effective (35 percent and 21 percent).

Some key trends in each scale:

Goal Setting: There appears to be more confidence about the role of leadership in relation to schools' guiding frameworks than about the embedding of the goals into ongoing use and evaluation.

Strategic Resourcing: The EPD schools gave highest ratings to the effectiveness of their school leadership in ensuring that the timetable reflected the school's priorities for teaching and learning, and lowest to items related to working with families and communities. In between come items related to teaching resource relevance and availability.

Curriculum Quality: School leadership was seen as most effective in ensuring the systematic monitoring of each student's progress and the existence of assessment plans to collect the information needed to monitor progress on priority learning goals, and least effective in ensuring that rigorous feedback was given to teachers about the quality of their schemes or unit plans, that all students experience challenging programmes and that all curriculum included content relevant to diverse learners.

Quality of Teaching: Just over half the EPD schools thought that their school leadership was highly or outstandingly effective in ensuring that everyone shared responsibility for student learning, that assessment data were used to improve teaching and that those teachers with particular expertise were used in the school to help other teachers' development. The lowest rating item was students provide feedback to teachers on the effectiveness of their teaching, followed by challenge and support to improve teaching for teachers whose students remain disengaged, and early identification and support provided for teachers having difficulty helping students reach important academic and social goals.

Teacher Learning: Open discussion of student results and teachers helping each other develop more effective teaching strategies, serious discussions of how to improve teaching and learning in staff meetings and analysis and use of student achievement patterns to plan professional learning priorities were the items most likely to attract highly or outstandingly effective ratings of school leadership. Schools were less than half as likely to give such ratings to the provision of systematic opportunities to improve teaching through observing effective colleagues at work, and teachers' use of a range of evidence sources to evaluate the effectiveness of their teaching.

Safe and Orderly Environment: Most EPD schools thought they had positive environments for learning, irrespective of culture. The gathering and use of student views in relation to school safety and culture were the two items on which the school leadership was least likely to be rated as effective.

Educationally Powerful Connections with Family, Whānau and Community: Almost two-thirds of the schools thought their leadership was highly or outstandingly effective in ensuring that staff were responsive to families' views about their child's learning needs. At the other end of the spectrum, just over a quarter of schools thought that their school leadership was effective in ensuring that parents understood the achievement levels of their children in relation to national benchmarks.

Māori Success: Schools were most likely to rate their school leadership as highly or outstandingly effective in relation to having clear school-wide targets for the academic achievement of Māori students, and least likely to rate them so for ensuring that there were professional development opportunities that enabled teachers to develop the knowledge and skills needed to provide quality teaching to Māori learners.

Principal Leadership: The top items in this scale were mostly related to integrity and gaining others' respect, and included making tough decisions when necessary. Identifying and resolving conflict quickly and fairly was the item with the lowest proportion of schools rating their principal as showing highly or outstandingly effective leadership.

Contexts for pedagogical leadership

Seven percent of the EPD principals had low levels of *support*, 72 percent had medium levels of support and 20 percent had high levels of support. Five percent had low levels of *barriers to pedagogical leadership*, 40 percent had low to medium levels, 47 percent medium to high levels and 7 percent, high levels of barriers to pedagogical leadership. Overall, we do see some marked constraints experienced by a significant minority of principals taking part in the EPD programme on their being able to focus on pedagogical leadership. Some of these constraints are related to the legitimate aspects of their role as leader of their organisation: aspects such as finance and property, paperwork required for external agencies (mostly related to school review or allocating resources), staff employment and student welfare, which cannot be ignored if a school is to remain viable and accountable. These constraints are most evident in relation to the size and composition of their workload, followed by teacher recruitment and retention, school governance capability in this area and expertise related to analysis of student achievement data and guidance about the most effective and affordable ways to raise student achievement.

Capacity and student issues were more likely to occur for principals at deciles 1–2 schools. Secondary principals and U7 principals were more likely than others to experience staff management as an erosion of their time for pedagogical leadership, and secondary principals were somewhat less likely to think their workload was manageable or sustainable. Rural principals and U1 and U2 principals were least likely to feel able to schedule enough time for educational leadership, and rural principals indicated some issues around paperwork for external agencies, governance understanding of student achievement and access to data management expertise.

Years of principal experience, in total, or at the current school, were not associated with views of the school context for pedagogical leadership.

Characteristics related to differences between school scores for educational leadership practices

High-scoring EPD schools on the educational leadership practices scale are most likely to be primary schools, small schools, rural schools and high decile. These differences in school characteristics related to ELP scores suggest that teacher views of school leadership effectiveness are likely to be lower where the school organisation is more complex—as it is in secondary and larger schools; or where the challenges of the student population are greater—as they are in deciles 1–2 schools and in secondary schools.

Relatively higher scores on the Māori Success school leadership scale were also likely to occur in small schools, rural schools and those with high Māori enrolment.

Principal leadership ratings were related to school size: the lower the school size, the higher the rating. They were also higher in rural schools and primary schools.

Principal experience, either in total or at the current school, was not related to school leadership practices or principal leadership ratings. This underlines the importance of ongoing professional development and learning for principals, since time alone does not make for higher levels of either principal leadership or school leadership.

Different EPD providers had some differences in the profiles of the schools they worked with, but some of the apparent differences may be due to the small size of some providers' groups. Which EPD provider a teacher's principal was working with was not a variable that made it into the multilevel modelling, indicating that the EPD provider groups are not substantially different from each other in terms of ELP scores.

Multilevel modelling showed that some variables do seem to account for much of the difference between schools in their overall school leadership scores. After accounting for these variables, only around 10 percent of the EPD schools showed distinctly different scores (either very low or very high).

The variables that the multilevel modelling found to be associated with differences in school perceptions of the quality of educational leadership practice included contextual factors—particularly school decile, school type and, to a lesser extent, the support for pedagogical leadership (and barriers to its exercise). The modelling also provides some indicators that the school leadership practices covered in the ELP have positive links with teacher morale, good workplace practices and judgements of principal quality.

Implications of ELP patterns in relation to the need for focused professional development and support for school leadership

The current levels of educational leadership practices do indicate that there is room to develop further, given that the existing research shows associations between most of these practices and student achievement.

We do not yet know whether schools need to be at the high or outstandingly effective levels of educational leadership practices to affect student achievement levels, or whether the “satisfactorily” effective level would be sufficient. So we cannot say that we need all schools to be experiencing high or outstandingly high levels of educational leadership practices in order to make the changes to student performance levels that are aspired to by the Government (e.g., the new National Standards are based on achievement progressions over time that are estimated to lead to the gaining of at least Level 2 NCEA).

While there is an association between ratings of principal leadership and the levels of school leadership as a whole, the fact that more than half of the teachers taking part in the survey have roles beyond their own classes shows that professional development for others related to these leadership practices is also important if we are going to raise overall levels of school educational

leadership. Some of these leadership practices can be thought of as “leadership” per se; others will also be covered in curriculum-related professional development, or in the ongoing ways in which people in schools work together, and deepening those ways of working together.

The associations between educational leadership practice scores and principals’ perception of support for their pedagogical leadership also raise the policy questions of ensuring that such support is available (e.g., continuing to address issues of teacher supply, and providing guidance for the most effective and affordable ways to raise student achievement).

Should professional development and support for educational leadership be targeted?

The associations between ELP scores and school decile and type, and in relation to principal perceptions of support or barriers to their pedagogical leadership raise the vexed questions of factors beyond individual school control. They also pose real policy issues, given that there is little likelihood in the near future of ensuring that we have a more even social mix in our schools, or of tackling the complex nature of secondary school organisation. Given this real constraint on developing school leadership practices, if there is any need for prioritisation for professional development and support for educational leadership, deciles 1–2 schools and secondary schools stand out.

There appears to be most scope for further development in relation to the Teacher Learning scale, and Māori Success; and in terms of practices related to feedback on performance and effectiveness, providing timely challenge and support to both teachers and students, including student voice, and supporting parent understanding of student achievement. It is likely that changing school practices in these areas would also mean changing school practices in other aspects also asked about in the ELP. Different schools would have different immediate challenges or projects for which the ground is well prepared, providing different “routes” into changing practice.

Implications for the EPD project

It would probably be useful to discuss the overall patterns and implications reported here with the EPD providers, particularly around how one might weave together (or “tackle”) several aspects together, or use one aspect as a route to tackle some desired deeper change.

Implications for the ongoing development and use of the ELP

We focus here on development and use at an aggregate level, rather than at the individual school level for formative and self-evaluative purposes.

School characteristics did show some quite marked associations with the ELP levels, even if not all of these remained in the final multilevel model. This means that it is probably desirable to develop some benchmarks for schools with different characteristics—e.g., range and average, or different levels, for secondary schools, for primary schools; for rural schools cf. urban; and schools of different decile. This could be done if we have a nationally representative sample of schools. The EPD schools do not provide such a sample on their own.

Finally, the ELP does provide a useful way of gauging and describing school leadership practices that are linked to teaching and learning. We cannot tell from the ELP levels alone whether they are high enough to make a real difference to student engagement and performance, or whether there is a minimal level that is necessary to ensure a given level of student engagement and performance. To do that, we would also need to link patterns in ELP scores over time, to patterns in student engagement and student performance over time.

1. Introduction

The Educational Leadership Practices Survey (ELP) was used in the Experienced Principals' Development programme (EPD) to inform the needs analysis carried out by participants and their providers from September to November 2009. Each participant received the report for their school within three days of the school completing the online survey, and these were shared with their providers. Providers also received aggregated reports for the group of principals they were working with. In this report, we describe the overall patterns for the 282 schools whose principals are taking part in the EPD and that completed the ELP. In this introduction, we give a brief outline of the ELP, and our approach to the work included in this report. We also describe the characteristics of the participating schools, principals and teachers.

In Section 2, we report the distribution patterns for each of the seven school leadership scales that make up the overall ELP scale, and for the principal leadership, Māori success and contexts for educational leadership scales.

In Section 3, we look at whether there are differences between school scores that are related to differences in school characteristics, principal experience and EPD provider.

In Section 4, we report the results multilevel modelling designed to find out which factors—teacher characteristics, teachers' workplace views and their views of their principal's effectiveness, school characteristics and the context for pedagogical leadership—appear to account more for the differences we see between schools in their overall ELP score.

We conclude in Section 5 with some comments on the trends we see in these patterns, and some recommendations for the Ministry of Education to consider in its work related to school leadership development.

The Educational Leadership Practices Survey

The ELP 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)*
- *Safe and Orderly Environment*
- *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)*,¹ and six dimensions for effective educational leadership practice, Educational Leadership Best Evidence Synthesis.² The ELP's main use is for formative school development, and it includes some highly aspirational items.

The overall leadership scale used in the ELP 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. In the trial and calibration of the final ELP ready for use in the EPD we found that each of these seven aspects had high internal reliability (alphas of 0.81 to 0.88)—the items in each scale “hung together” well, and were measuring dimensions of the same underlying construct. The seven scales also have a high level of intercorrelation, and a Rasch analysis confirms that the seven scales can be treated as different aspects of a single underlying meta-construct—overall leadership practice. The items used to make the Māori Success scale were originally included in these seven scales (and are asked within the survey, rather than as a separate set of questions). But we found that these items did not contribute to the internal reliability of the scales they were in, and in fact “hung together” well as a separate scale. The Principal Leadership scale was a separate set of questions from the start, and is not included in the overall school leadership scale since it focuses on the principal alone.

Principals and teachers are asked the same questions for each of these nine aspects, and to also give their sources of evidence for their judgement (personal observations, school documentation or other sources). Principals also answer a set of questions related to the school context for pedagogical leadership. Teachers answer a short set of questions related to their morale and workload. Both also answer questions about their experience and demographic characteristics. These questions on school context, morale and workload, experience and demographic characteristics, along with information on school characteristics (type, size and socioeconomic decile) are reported descriptively, and also used in analysis of the nine aspects of school leadership.

Individual school reports give principals their own and the average teacher response. This enables principals to compare their responses with their teachers', as well as see the picture for their

¹ Ministry of Education. (2008). *Kiwi leadership for principals. Principals as educational leaders*. Wellington: Author.

² 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.

school as a whole. The range of teacher responses is indicated by a confidence interval around the mean for each of the items in the nine scales they have in common.

Our main unit of analysis for this overall picture of the EPD participants is the individual school. For this, we have used teacher scores only. To provide frequency descriptions (e.g., the proportion who score highly for a particular scale item), we have used the average score for each school. In the multi-level models we have undertaken to gauge the factors that might account for differences between school scores on each of the scales (e.g., Does school size matter in relation to the overall scale or Curriculum Quality? Does length of principal's experience? Does the context for school leadership matter? Do different EPD providers have a different profile of participants in terms of their ELP levels?), we have been able to use each teacher's individual ratings ("nested" or "clustered" within the school).

We considered using teacher and principal scores together, but decided against this since the first option of a simple aggregation would mix two different perspectives, and potentially compress the between-school differences, and the second option, of weighting the principal's perspective, raised the question of what weight to give the principal's scores—to which there is no clearcut answer, meaning that different weightings could yield different pictures. What we have done in Section 2 is to report both school average and the principal scores. We have also reported teachers' individual scores, without aggregating them per school, since this is the first time we have large-scale data for the ELP, and it is useful to see patterns for both the schools and for teachers as a cross-school group (one can think of the frequency data here as showing what proportion of teachers work in schools with a particular level of the aspect of leadership of interest).

We use the overall school leadership scale to provide the first description of the level of school leadership quality in the EPD schools both overall and for each of the seven scales that contribute to this overall scale. Because there is a high level of intercorrelation between the scales, they have similar means. So the information about any differences between the scales—do we see, for example, a greater range of school scores relating to the scale of Goal Setting than we do for the scale of Curriculum Quality?—comes from looking at the size of the different quartiles, and the extent of the quartile range. We discuss these differences in Figure 1, at the start of the next section.

To take a closer look at the items that make up each scale, and to describe the material on the two scales that do not contribute to the overall school leadership quality scale, we used the mean teachers' score for each school. Since means compress the range of views in a school, and often do not provide whole numbers (e.g., the mean of the five teachers who score a particular item 5, 3, 4, 4 and 5 is 4.2), we could not simply translate each school's mean into the existing whole-number 5-point scales. We plotted the distribution of school scores on a range of items for different scales, and used this distribution to suggest these cut-off points to assign school average scores to an equivalent whole-number 5-point rating. So, for the nine scales outlined above, we have converted school averages of 1–1.75 to a 1; 1.751–2.9 to a 2; 2.91–3.5 to a 3; 3.51–4.25 to a

4 and 4.251–5 to a 5. We have then been able to place each school on a 1–5 scale, comparable to the scale we used in the survey, where 1 = not at all effective level, and 5 = outstandingly effective level. The cut-points we have decided to use are not completely arbitrary—they were not plucked from the air—but slightly different cut-points could be used based on the same distribution that would give a slightly different distribution of schools in each level of school leadership. To ensure consistency between the baseline survey in late 2009 and the second survey in late 2010, we will use the same cut-points used here to analyse any shifts over time. We can also compare the scale scores on the overall school leadership scale to analyse shifts over time.

Profile of EPD participants completing the ELP in late 2009

Schools and principals

The EPD schools that completed the ELP differ somewhat from the national profile of schools. They contain a higher proportion of larger schools, deciles 7–10 schools, secondary schools and schools with medium and high levels of Māori enrolment than the national profile; and fewer deciles 1–2, rural and composite schools.

Table 1 Profile of participating EPD schools—school characteristics

	MOE national total for state and state-integrated schools % (n=2,486)	EPD ELP schools % (n=282)
School type		
Primary	75	75
Intermediate	5	6
Composite	4	2
Secondary	13	16
Other	3 ³	1
School size (U grade)		
U1 & U2	27	14
U3 & U4	35	36
U5 & U6	28	35
U7+	10	16
Location		
Urban	71	79
Rural	29	21
Socioeconomic decile		
1–2	21	16
3–4	20	22
5–6	20	19
7–8	19	22
9–10	19	21
Proportion of Māori students on roll		
Less than 8%	15	16
8–14%	21	27
15–30%	30	29
31% +	33	28

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

Response rate

The survey was undertaken by 4,716 teachers. We did not have the total number of teachers employed by each of the participating schools, so we cannot calculate actual response rates. We

³ This includes The Correspondence school, special schools, teen parent unit, Years 7–10 schools and kura teina.

have estimated the response rates by dividing the number of students in the participating schools (using July 2009 Ministry of Education data) by the teacher:student ratios used to calculate curriculum staffing given in the Ministry of Education Funding, Staffing and Allowances handbook, using a weighted average of this ratio of 1:25.75 for primary, 1:29 for intermediates and 1:21 for secondary schools. This omits management staffing, so the response rates will be slightly overestimated. The average rate of response from the EPD schools taking part in the ELP survey shown by this estimation is high. This would suggest that the picture we have of school perceptions of leadership for these schools is pretty robust.

Table 2 Estimated school average response rate

	% (n=282)
School type	
Primary	96
Intermediate	89
Composite	99
Secondary	85
Other	100

Principal experience

Most of the principals (86 percent) taking part in the EPD and the ELP had at least five years' experience in their role. Twenty-five percent had been in their role for more than 15 years, 23 percent between 11 and 15 years, 35 percent between six and 10 years, 12 percent between two and five years and 2 percent (five principals) had been in their role for less than two years: a rather shorter time than one might have thought for the target group of the EPD.⁴

Table 3 gives the mean years of experience as a principal, years as the principal of their current school, years of senior manager experience in a school before becoming a principal, years of classroom experience and their current age.⁵ The mean age for the length of experience in the current school is slightly but not significantly less than the means in the NZCER 2007 national primary survey or the NZCER 2009 national secondary survey.

⁴ These figures are somewhat different from the profiles in the NZCER 2007 national primary survey, and 2009 national secondary survey.

⁵ To calculate these, we used mid-points for the categories we gave in the survey (e.g., we took 13 as the mid-point of the category 11–15 years).

Table 3 Mean and median years of experience and age, with range, for participating principals

(n=271) ⁶	Mean	Median	Range (based on mid-points of categories in survey)
Years of principal experience	11.2	8	1–18
Years as principal at current school	7.1	8	1–18
Years as senior manager before becoming a principal	5.5	4	1–18
Years as classroom teacher before becoming a principal	12.7	13	1–18
Current age	52.2	54.5	35–63

Thirty-six percent of these principals had completed the First-Time Principals programme, which started in 2002.

Interestingly, given that 45 percent of principals nationally are female (using 2008 figures), 54 percent of the EPD participants taking part in the ELP who gave their gender are female. Women in the EPD group were least likely to be principals of decile 10 schools (35 percent).

Eighty-four percent of the principals were Pākehā, 11 percent were Māori, 1 percent was Pasifika and one principal was Asian. We do not have ethnic information for 4 percent of the principals.

Teachers

Many of the teachers were also experienced, and half or more had been at their current school for four or more years.

Table 4 Mean and median years of experience, with range, for participating teachers

(n=4,275–4,294) ⁷	Mean	Median	Range (based on mid-points of categories in survey)
Years of teaching experience	11.4	13	1–18
Years at current school	6.2	4	1–18
Years with current principal at current school	3.8	4	1–18

⁶ Not every principal gave us this data.

⁷ Not every teacher gave us this data.

More than 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. Only 42 percent appeared to be classroom teachers without some school leadership contribution. Thirty percent were senior and middle school managers, such as deputy or assistant principals, deans, syndicate or faculty leaders or heads of department; and 20 percent were specialist teachers.⁸

Seventy-nine percent of the teachers had permanent jobs, the same as the national statistics for the teaching force in April 2008. Thirteen percent were on fixed-term contracts, and relieving teachers made up 1 percent.

Of those for whom we have gender information, 77 percent of the teachers were female (somewhat more than the 72 percent of the national teaching force in April 2008), and 23 percent male. In terms of ethnicity, 73 percent of the participating teachers were Pākehā, 9 percent were Māori, 4 percent each were Pasifika or Asian and 10 percent were “other”, or were not asked this question.⁹

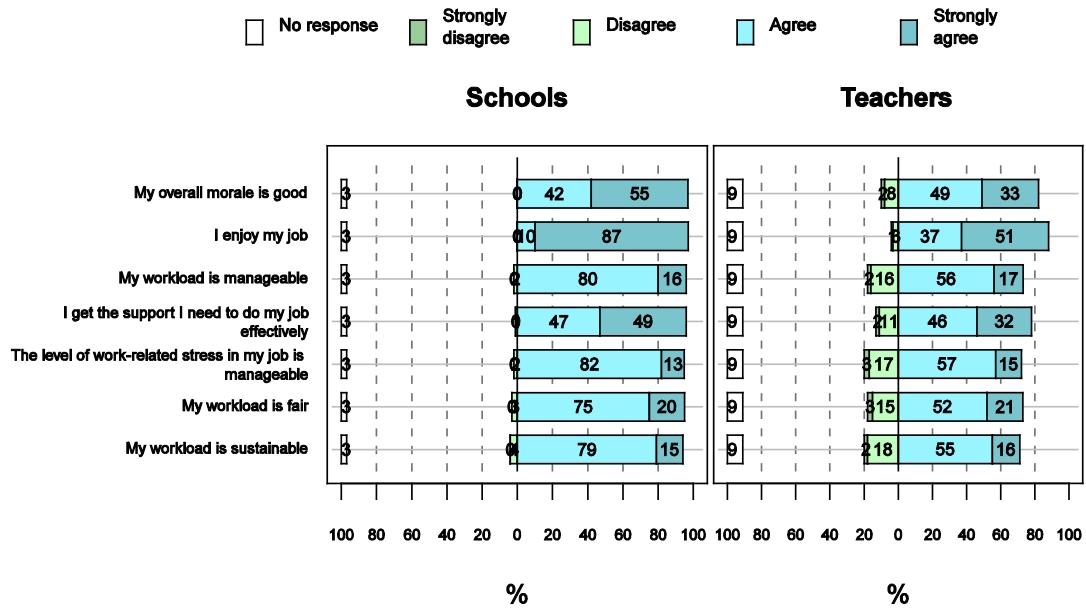
Figure 1 gives the distribution of teacher views about their morale and workload, counting individual teachers on the right, and the average per school on the left. The difference between the two shows the compression effects of using school averages, but it also shows that the distribution of teachers’ views is uneven between schools.¹⁰

⁸ We do not have information on the roles for 7 percent.

⁹ Some of the schools whose data we use here took part in the trial of the ELP (participating schools in the trial could use that data as part of their EPD commitment), and we did not ask teachers for their gender or ethnicity in the trial.

¹⁰ To calculate the average per school, we looked at the distribution of individual teacher scores, and set cut-points to assign mean scores to one of the four whole numbers used in this scale. So the cut-points were: 1–1.75; 1.751–2.499; 2.5–3.25; and 3.251–4 (where 1= strongly disagree, and 4=strongly agree).

Figure 1 Teacher morale, workload and support



Most teachers in the EPD schools who completed the ELP Survey are positive about their morale, job enjoyment and workload. Around a fifth of the teachers think their workload is unmanageable, unsustainable and unfair and, to a lesser extent, that they do not have the support they need. This is a somewhat more sanguine picture than we found in the 2007 NZCER primary national survey and 2009 secondary national survey (five of the seven items asked here were not asked in exactly the same way in those surveys; so looking only at the two that were, and the primary survey, 63 percent of primary teachers in 2007 said they got the support they needed to do their job effectively, cf. 78 percent in the EPD schools; and 42 percent said the level of work-related stress in their job was manageable, cf. 82 percent in the EPD schools).

The school averages in Figure 1 show that the proportion of schools where teachers on average feel they have workload difficulty is less than 5 percent of the schools taking part in the EPD.

2. Patterns of school leadership in the EPD schools

In this section, we start by showing the range of school average scores on the overall leadership scale, alongside the seven scales that contribute to it. We then move to a different metric that enables us to chart school scores on the items for each of these seven scales, alongside the scores for the Principal Leadership and Māori Success scales, with information on the sources of information that teachers reported using when they made their rating on the items.

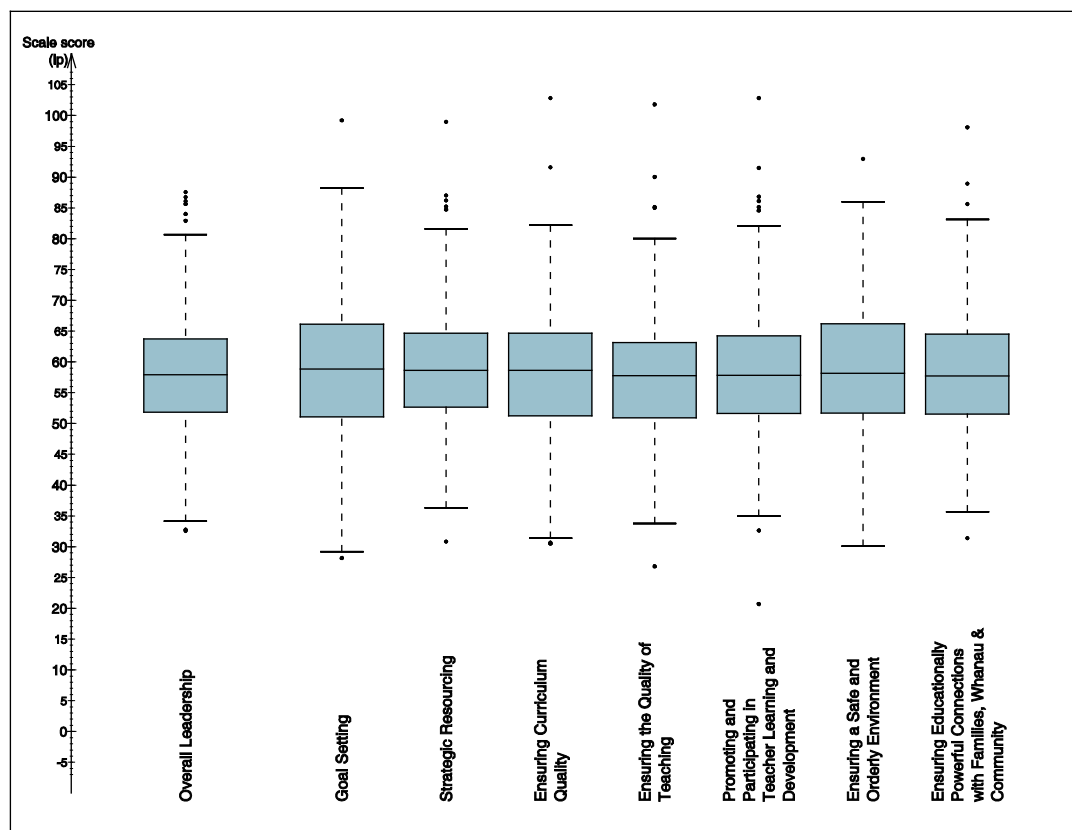
Finally in this section, we show the range of principal views on the contexts for their pedagogical leadership.

Overall school leadership scale and the seven school leadership scales that contribute to it

Figure 2 shows that while there was a wide range of scores on the overall leadership scale (from 33 to 88 lp units¹¹ on the scale), half of the schools were scoring between 52 and 64 lp units, with the mean at 58 lp units. The similarity of the box plots demonstrates the high level of intercorrelation between the scores on each separate aspect and the overall leadership practices score.

¹¹ Using teachers' scores to provide a mean for each school. Lp = leadership practices unit on the scale (i.e., one unit = 1 on the scale of -5 to 105).

Figure 2 EPD schools' overall leadership and contributing scales scores



Levels of high or outstandingly effective school leadership

To look at the distribution of the EPD schools on each scale separately, and so that we can see the mean scores and range for the Principal Leadership and Māori Success scales alongside the seven scales that contribute to the overall leadership scale, we use the conversion of teacher mean scores to the 5-level Likert scale used in the survey described in the introduction to this report.

In discussing the results, we have focused on the proportion of schools whose teaching staff on average have rated their school leadership as highly or outstandingly effective. We provide an average for the proportion who give these ratings for each scale (adding the totals and dividing by the number of items in the scale).

We have also included the principal and teacher views (aggregated without reference to school). These tend to give lower levels of ratings for school leadership than the school averages, mainly because of the cut-points used for the conversion. We also discuss differences between principal and teacher views (as a whole; differences at the school level are discussed at the end of this chapter) in relation to each scale.

Table 5 gives the range and average proportion of schools, principals and teachers who rated their school leadership as highly or outstandingly effective for each of the scales.

Goal Setting, Safe and Orderly Environment, and Principal Leadership were the scales that had the highest proportions of schools rating their school leadership as highly or outstandingly effective (60 percent or more). *Teacher Learning* and *Māori Success* were the scales that had the lowest proportions of schools rating their school leadership as highly or outstandingly effective (36 percent and 21 percent).

Table 5 Range and average proportions rating school leadership as highly or outstandingly effective for EPD schools, principals and teachers

	Goal Setting	Strategic Resourcing	Curriculum Quality	Quality of Teaching	Teacher learning	Safe & Orderly Environment	Educationally Powerful Connections with Families, Whānau & Community	Māori Success	Principal Leadership
School average item score	60%	43%	46%	41%	36%	60%	46%	21%	63%
School range	39–73	22–63	18–71	10–58	20–54	41–77	27–65	10–30	55–77
<i>Principal average item score</i>	49%	45%	39%	40%	37%	65%	37%	23%	63%
<i>Principal range</i>	24–63	20–63	19–59	9–64	20–51	43–75	27–46	18–31	44–78
Teacher average item score	51%	40%	44%	41%	38%	50%	47%	25%	56%
Teacher range	36–62	27–52	27–59	23–52	31–49	40–62	31–51	18–33	49–64

Differences between school (teacher average), principal and teacher ratings on the ELP scales

Similar proportions of schools and principals rated school leadership as highly or outstandingly effective for five of the nine scales, with schools more likely than principals to give this rating in relation to Goal Setting, Curriculum Quality and Educationally Powerful Connections with Families, Whānau and Communities. Principals were more likely than schools to give this rating to Safe and Orderly Environment. There is a wider range of scores among principals than among teachers, but principals and teachers had similar proportions giving this high rating for four of the nine scales. Principals were more likely than teachers to give this rating to *Strategic Resourcing*,

Safe and Orderly Environment and *Principal Leadership*. Teachers were more likely than principals to give this rating to *Curriculum Quality* and *Educationally Powerful Connections with Families, Whānau and Community*.

The scales in detail

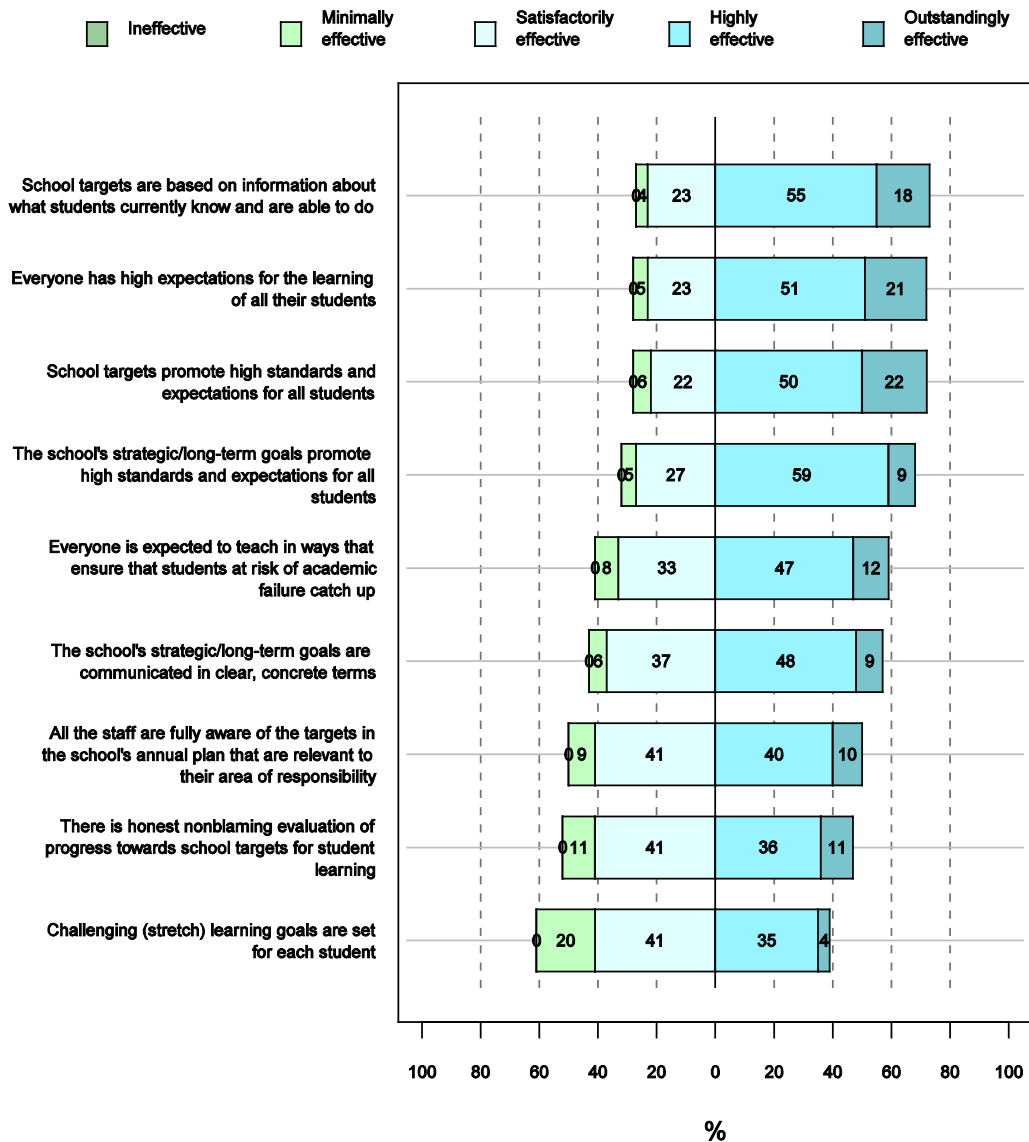
Next, we report the patterns for the items making up each scale, since these reveal more about the kinds of leadership practices that are most commonly occurring now, as teachers perceive them, and those that are less likely to be occurring.

Goal Setting

On average, 60 percent of the EPD schools rated their school leadership in relation to **goal setting** as highly or outstandingly effective.¹² This ranges from more than 70 percent for items related to high expectations for student learning and basing school targets on what students currently know and can do, to 50 percent or less in relation to staff awareness of school targets relevant to their work, honest and nonblaming evaluation of school progress towards its targets and the setting of challenging learning goals for each student. There appears to be more confidence about the role of leadership in relation to schools' guiding frameworks than about the embedding of the goals into ongoing use and evaluation.

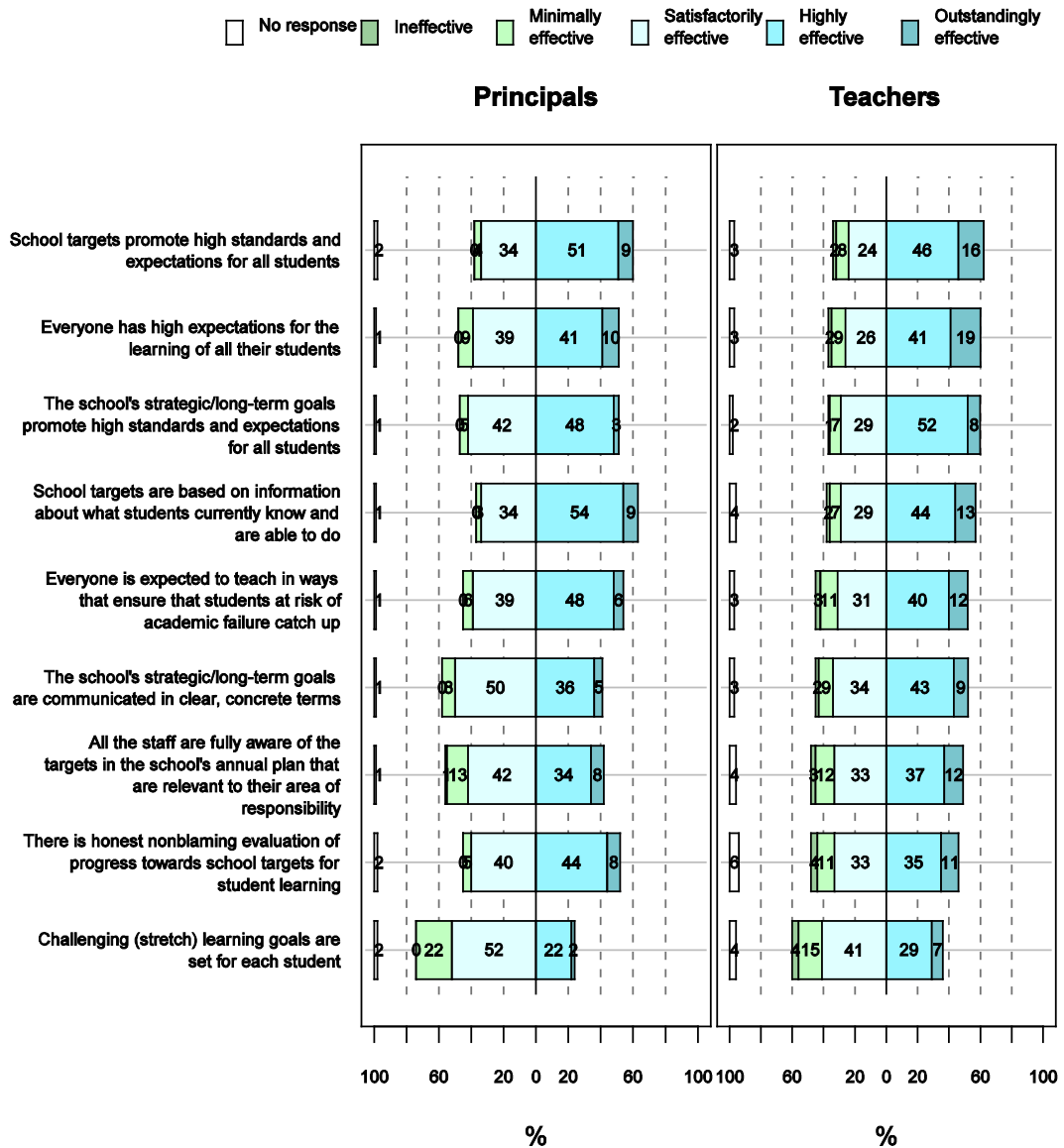
¹² Personal observations were the sources of this rating in around 80 percent of the schools for the items, with other sources used by 20–40 percent, particularly for the school target setting. Around half or more of the principals also mentioned other sources.

Figure 3 EPD schools—range of scores for Goal Setting



When we look at principals' and teachers' responses as a whole (without grouping teacher responses by school), we see similar but not identical patterns, and lower levels of strengths in this area. The average proportion of principals giving a highly or outstandingly effective rating to school leadership on the Goal Setting items was 49 percent, with only 24 percent thinking that the school leadership was highly or outstandingly effective in setting challenging learning goals for every student. The average proportion of teachers giving a highly or outstandingly effective rating to school leadership on the Goal Setting items was 51 percent. Teachers gave lower ratings than principals to these items: *school targets are based on information about what students currently know and are able to do; there is honest nonblaming evaluation of progress towards school targets for student learning.*

Figure 4 Goal Setting—principal and teacher views

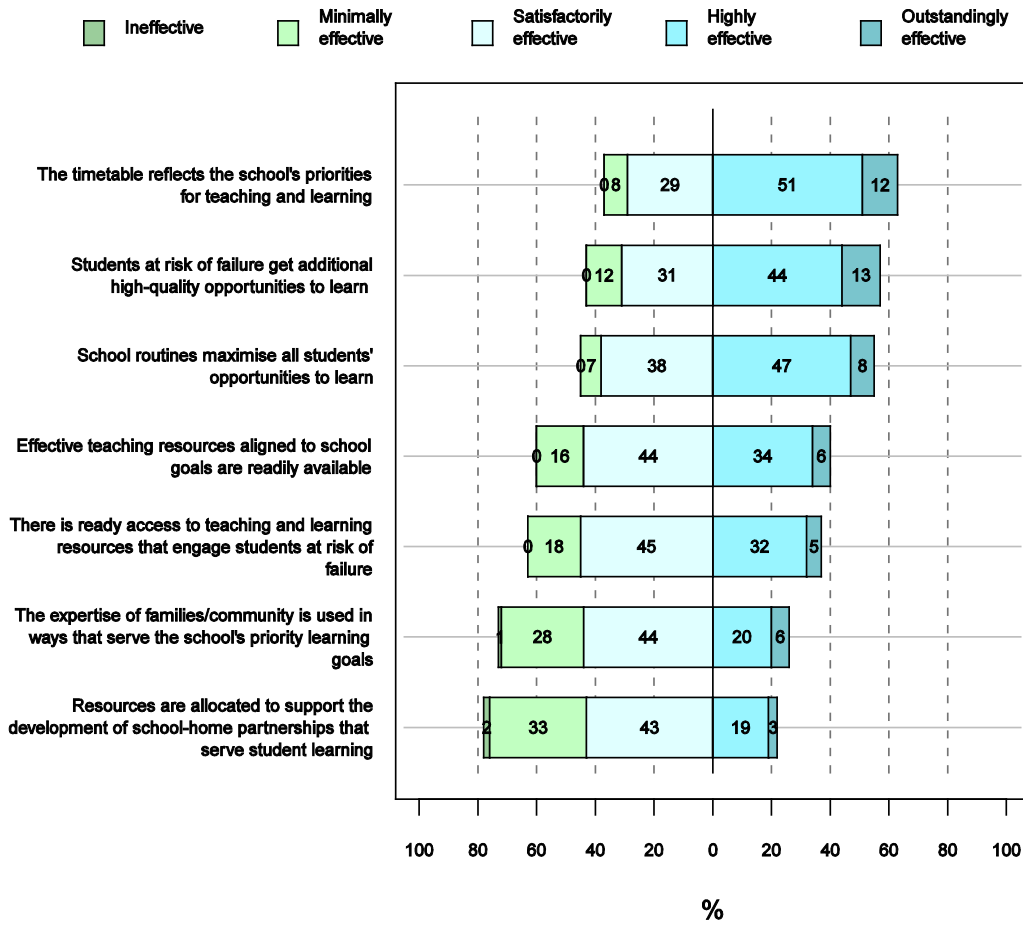


Strategic Resourcing

On average, 43 percent of the EPD schools rated their school leadership in relation to **strategic resourcing** as highly or outstandingly effective.¹³ This ranges from 63 percent where the teaching staff thought that the school leadership was highly or outstandingly effective in ensuring that the timetable reflected the school's priorities for teaching and learning, to less than 30 percent for the items related to working with families and communities. In between come items related to teaching resource relevance and availability.

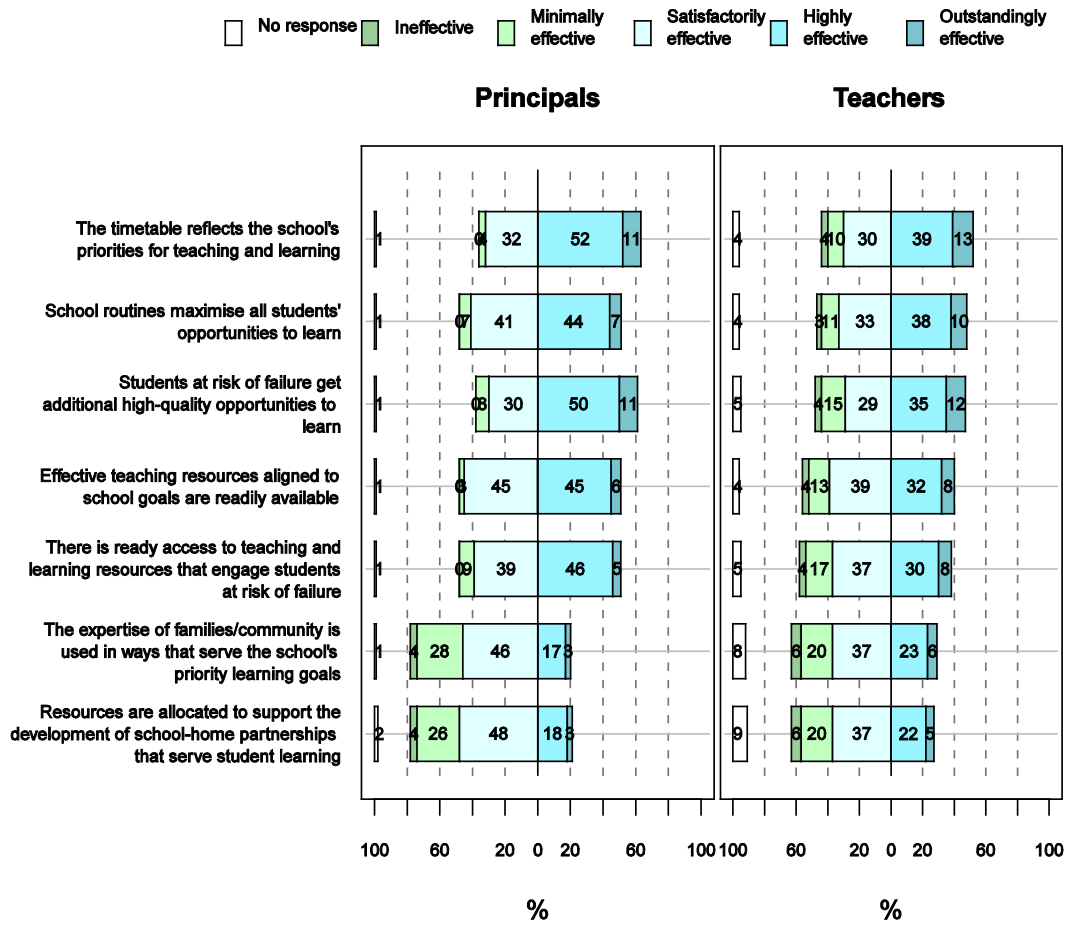
¹³ Personal observations were the major source of ratings for the Strategic Resourcing scale, with less mention by teachers of other sources than for the Goal Setting scale. Principals were also somewhat less likely to mention other sources than they had been for the Goal Setting scale.

Figure 5 EPD schools—range of scores for Strategic Resourcing



Principal and teacher aggregated views on the Strategic Resourcing items showed a similar pattern to the overall school pattern, with an average of 45 percent of principals rating the effectiveness of school leadership with regard to strategic resourcing as highly or outstandingly effective, and an average of 40 percent of teachers. Principals gave higher ratings than teachers for all the items bar the two focused on work with families and community.

Figure 6 Strategic Resourcing—principal and teacher views

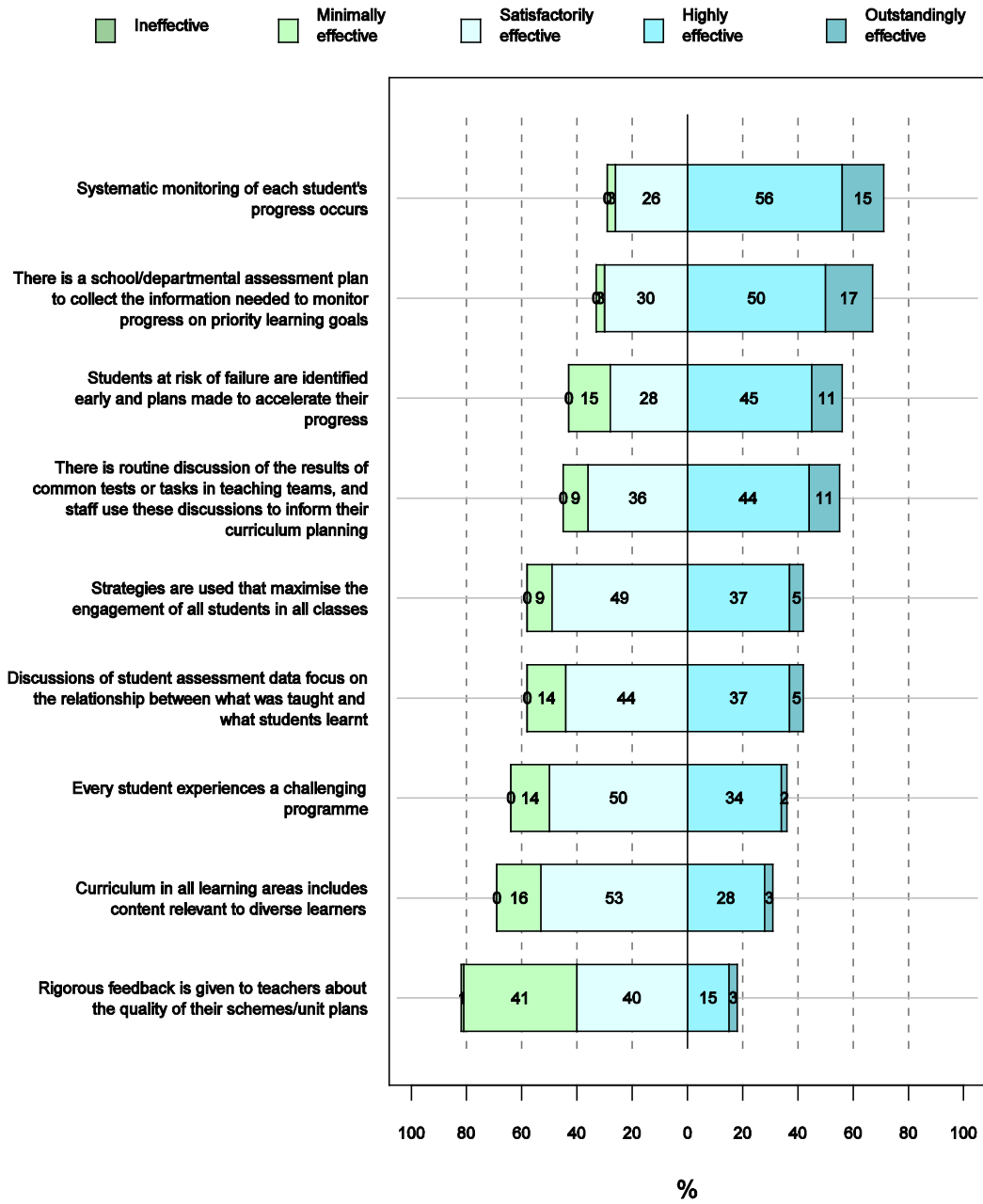


Curriculum Quality

On average, 46 percent of the EPD schools rated their school leadership in relation to ensuring **curriculum quality** as highly or outstandingly effective.¹⁴ At the top end of the spectrum, the teaching staff in 71 percent of the schools thought that the school leadership was highly or outstandingly effective in ensuring that there was systematic monitoring of each student's progress and 67 percent also thought this about the existence of assessment plans to collect the information needed to monitor progress on priority learning goals. At the other end of the spectrum, only 18 percent of schools thought their school leadership was highly or outstandingly effective in ensuring that rigorous feedback was given to teachers about the quality of their schemes or unit plans. Towards this end of the spectrum also come *curriculum in all learning areas includes content relevant to diverse learners* and *every student experiences a challenging programme*.

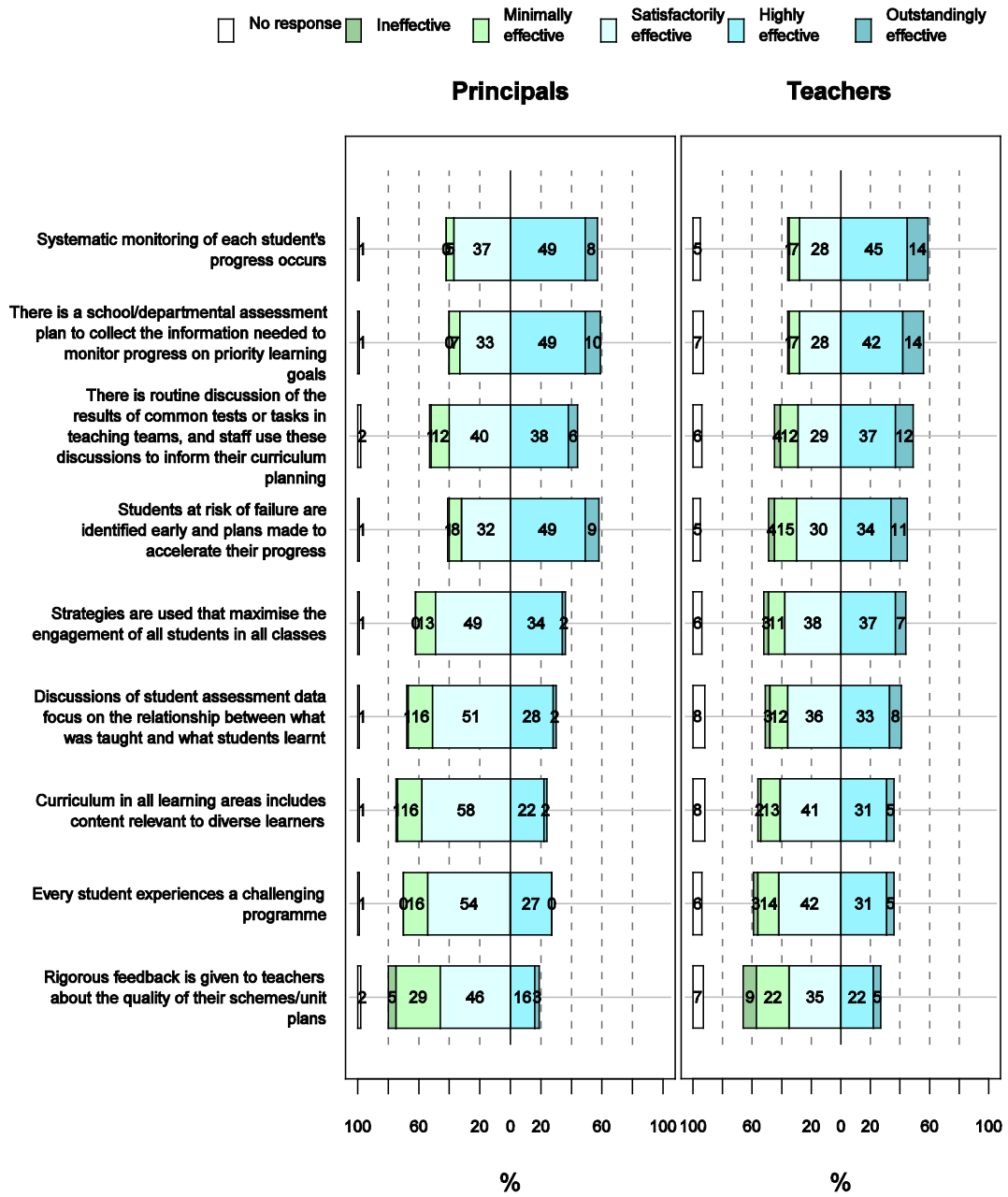
¹⁴ Personal observations were the major source of ratings for the Curriculum Quality scale, with around 20–30 percent of teachers and around 50–60 percent of principals (also) mentioning other sources.

Figure 7 EPD schools—range of scores for Curriculum Quality



Thirty-nine percent of the EPD principals and 44 percent of teachers gave high or outstandingly effective ratings on average to the Curriculum Quality items, with the range following the same pattern as for the schools. Principals' views tended to be less sanguine than teachers' for all items bar two: they gave a higher rating to school leadership effectiveness in relation to the early identification and planning for students at risk of failure and a slightly higher rating in relation to school/departmental assessment plans to monitor progress.

Figure 8 Curriculum Quality—principal and teacher views



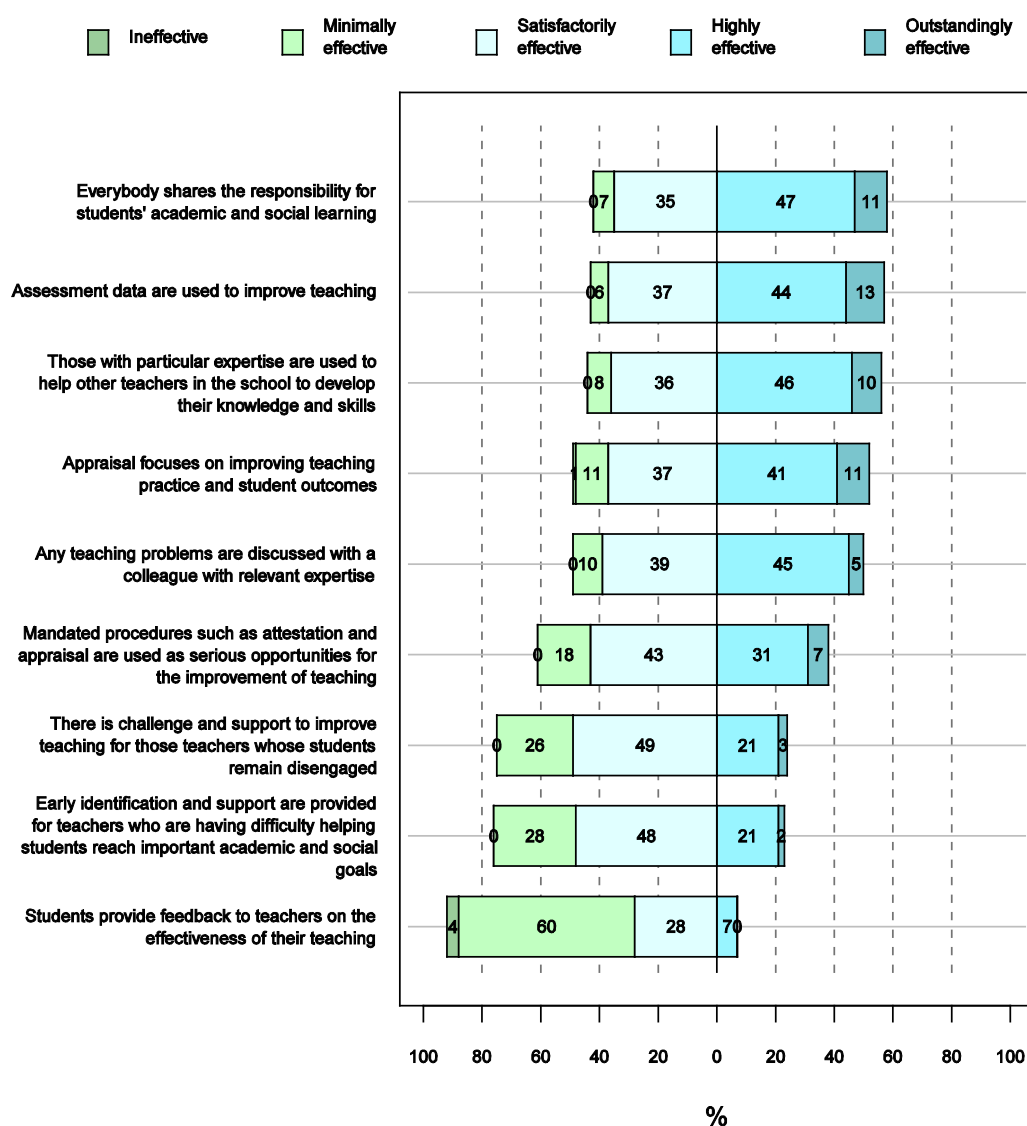
Quality of Teaching

On average, 41 percent of the EPD schools rated their school leadership in relation to ensuring the **quality of teaching** as highly or outstandingly effective.¹⁵ Three items were rated more highly: 56–58 percent of the schools thought that their school leadership was effective in ensuring that

¹⁵ Personal observations were the major source of ratings for the Quality of Teaching scale, with around 20 percent of teachers and around 50 percent of principals (also) mentioning other sources.

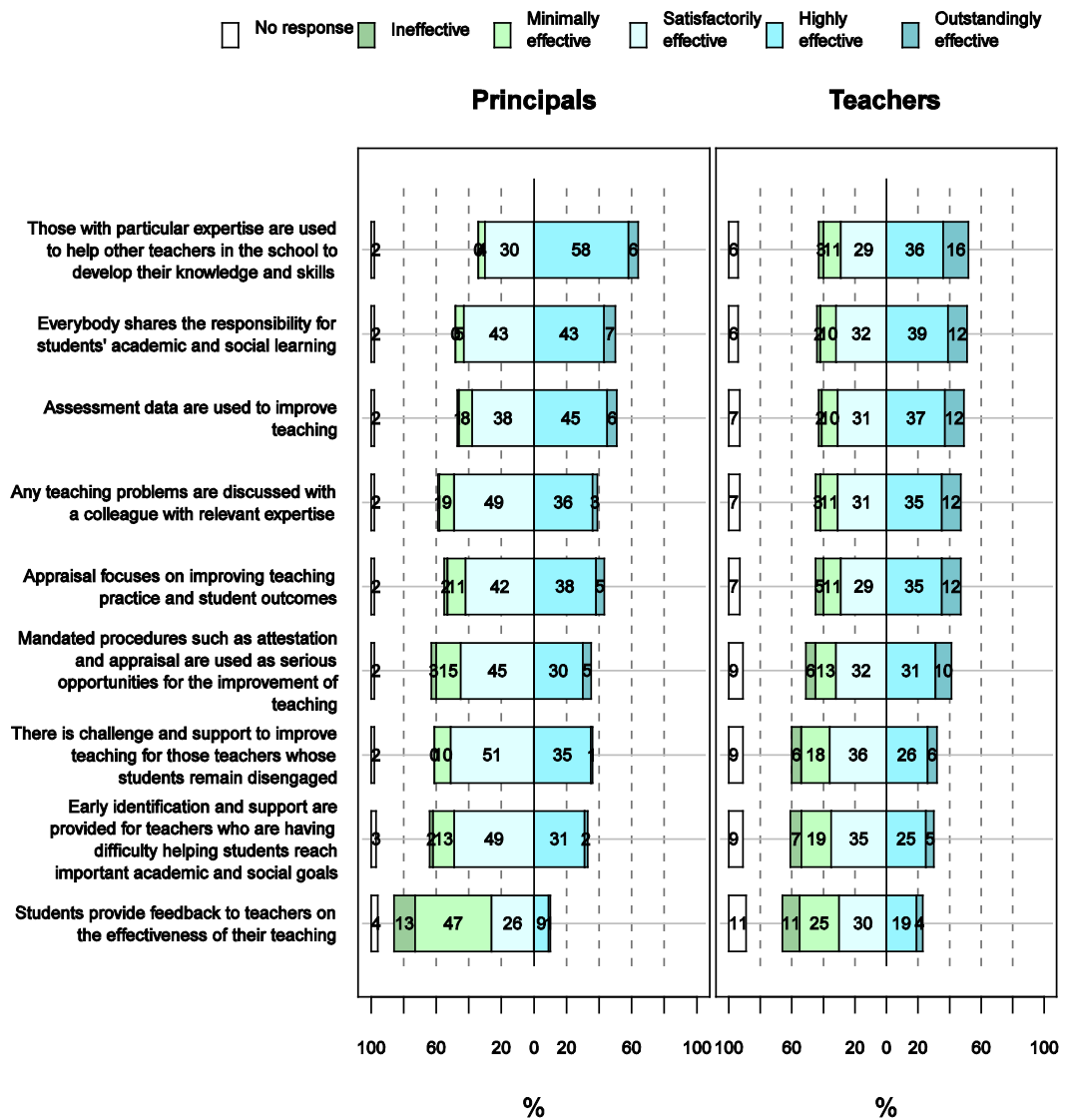
everyone shared responsibility for student learning, that assessment data were used to improve teaching and that those teachers with particular expertise were used in the school to help other teachers' development. The lowest rating item (10 percent) was *students provide feedback to teachers on the effectiveness of their teaching*. We have seen that aspects of challenge and early identification of need for student performance have tended to attract these high ratings less often; in this scale we see these two aspects tend to be less frequent for teachers also: *challenge and support to improve teaching for teachers whose students remain disengaged* (24 percent), and *early identification and support provided for teachers having difficulty helping students reach important academic and social goals* (23 percent).

Figure 9 EPD schools—range of scores for Quality of Teaching



Forty percent of the EPD principals and 41 percent of the teachers gave high or outstandingly effective ratings on average to the *Quality of Teaching* items. On this scale, we see a more mixed pattern when we compare principal and school views. Principals' views were more sanguine for three of the items—around the challenge, support and early identification of teachers whose performance could be improved, and the use of teacher expertise in the school for other teachers' development. They showed similar ratings for students providing feedback to teachers on their effectiveness, and the use of procedures such as appraisal and attestation to improve teaching and lower ratings on the other items. Teachers' and principals' ratings were much the same for three of the items (sharing responsibility for learning, use of assessment data to improve teaching and early identification and support for teachers experiencing problems). Teachers' ratings were lower on the use of in-school expertise for teacher development, and challenge and support to improve teaching, and higher for the remaining items on the Quality of Teaching scale.

Figure 10 **Quality of Teaching—principal and teacher views**



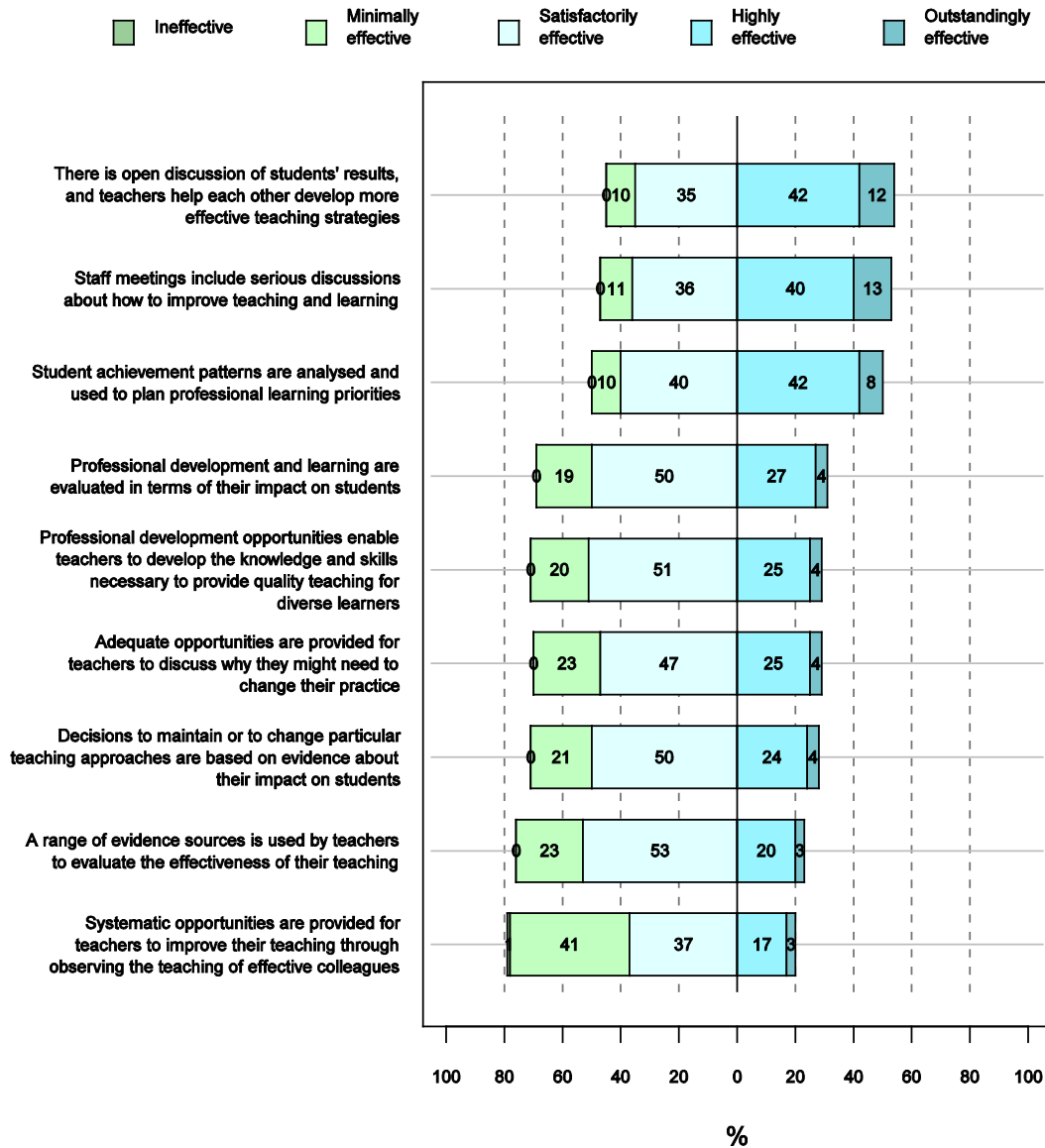
Promoting and Participating in Teacher Learning and Development

On average, 36 percent of the EPD schools rated their school leadership in relation to ensuring the **promotion and participation in teacher learning and development** as highly or outstandingly effective.¹⁶ The three items that headed this scale were open discussion of student results and teachers helping each other develop more effective teaching strategies,¹⁷ serious discussions of how to improve teaching and learning in staff meetings and analysis and use of student achievement patterns to plan professional learning priorities (50–54 percent of schools gave their leadership highly or outstandingly effective ratings). Schools were less than half as likely (23 and 20 percent) to give such ratings to the provision of systematic opportunities to improve teaching through observing effective colleagues at work, and teachers' use of a range of evidence sources to evaluate the effectiveness of their teaching.

¹⁶ Personal observations were the major source of ratings for the Teacher Learning and Development scale, with around 20 percent of teachers and around 50 percent of principals (also) mentioning other sources.

¹⁷ This item may be drawing on views of two separate activities—the discussion of results; and teachers helping each other—rather than the linked activities intended.

Figure 11 EPD schools—range of scores for Teacher Learning and Development

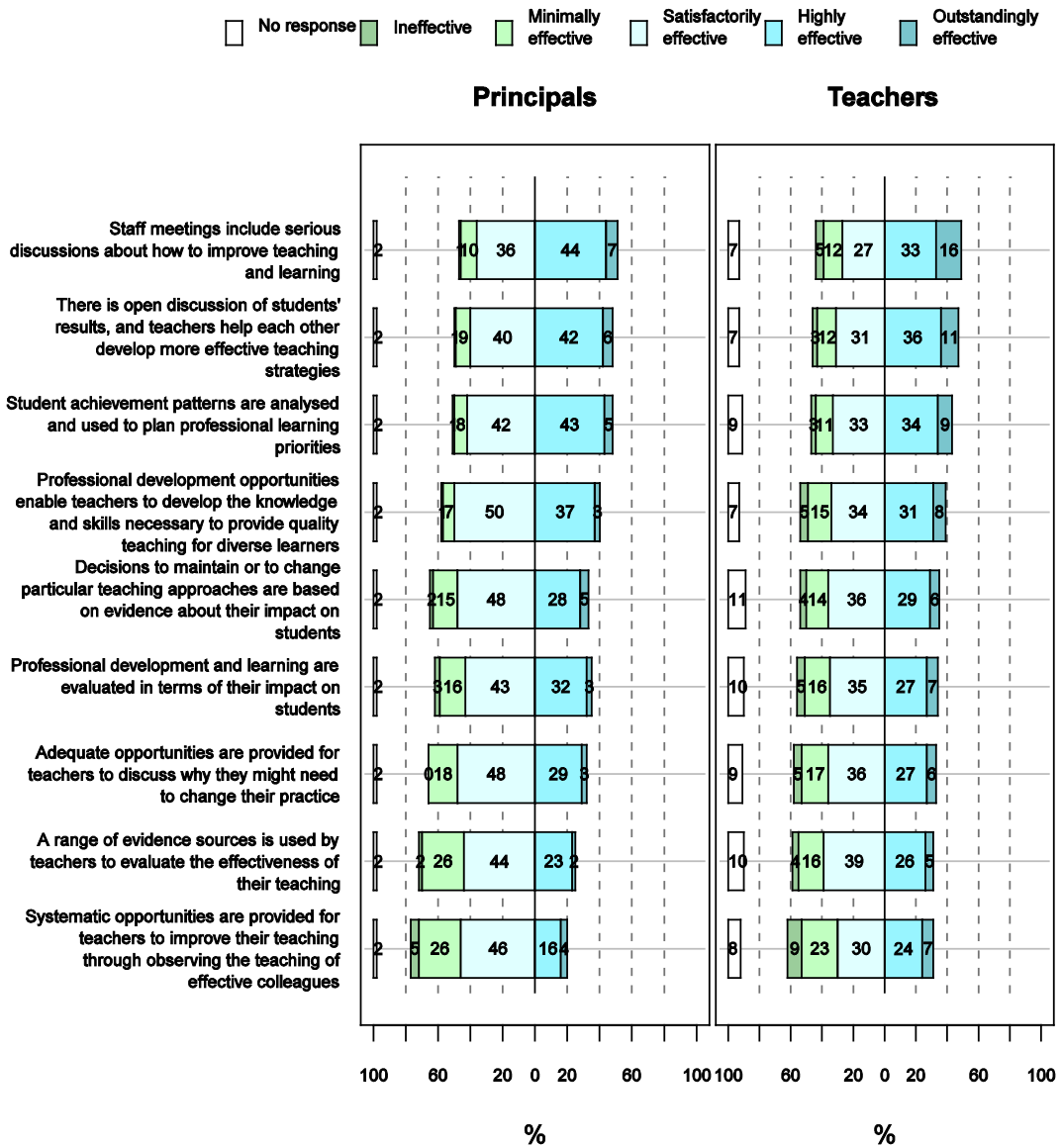


Principals' average highly or outstandingly effective score on the items on this scale was 37 percent, and for teachers across schools the average such score was 38 percent. These averages are the closest for any of the seven scales that make up the overall leadership scale. There was also a marked consistency in the proportions giving highly or outstanding in both groups, with two exceptions. Teachers were more likely to give this rating to their school leadership in relation to the use of evidence sources to evaluate teaching effectiveness, and to opportunities to observe effective colleagues.

Principal and school views were similar for five of the nine items on this scale. Principals were more sanguine about three of the items—particularly with regard to professional development opportunities that enabled teachers to develop knowledge and skills to provide quality learning for

diverse learners. They were less sanguine about the effectiveness of school leadership in ensuring open discussion of students' results, and teachers helping one another to develop more effective teaching strategies.

Figure 12 Teacher Learning and Development—principal and teacher views



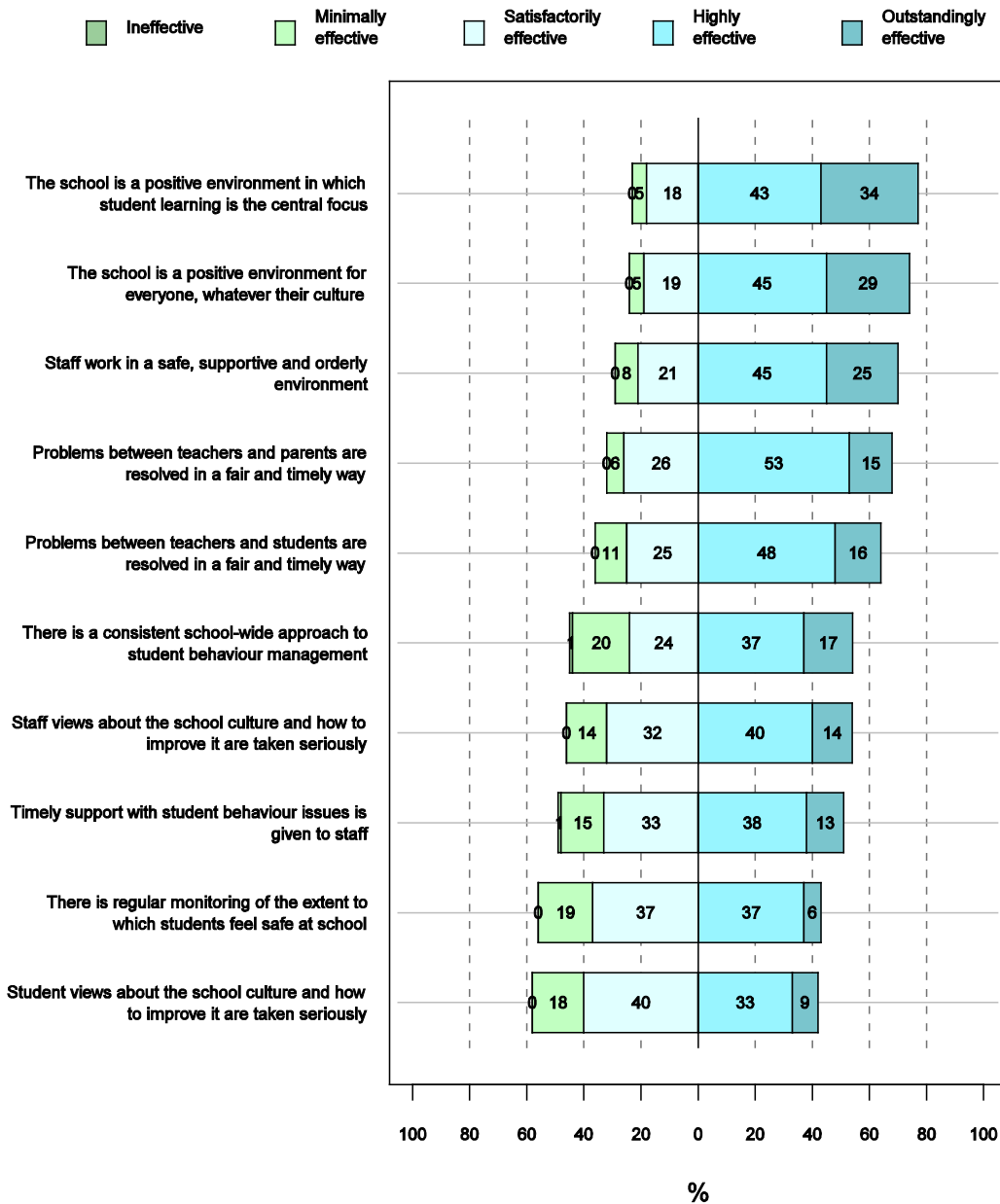
Safe and Orderly Environment

On average, 60 percent of the EPD schools rated their school leadership in relation to ensuring a **safe and orderly environment** as highly or outstandingly effective.¹⁸ The two items that headed this scale were related to the school being a positive environment focused on student learning, and

¹⁸ Personal observations were the major source of ratings for the Safe and Orderly Environment scale, with around 20 percent of teachers and around 50–60 percent of principals (also) mentioning other sources.

a positive environment for everyone, no matter what their culture is (77 and 74 percent). The gathering and use of student views in relation to school safety and culture were the two items on which the school leadership was least likely to be rated as effective (43 and 41 percent).

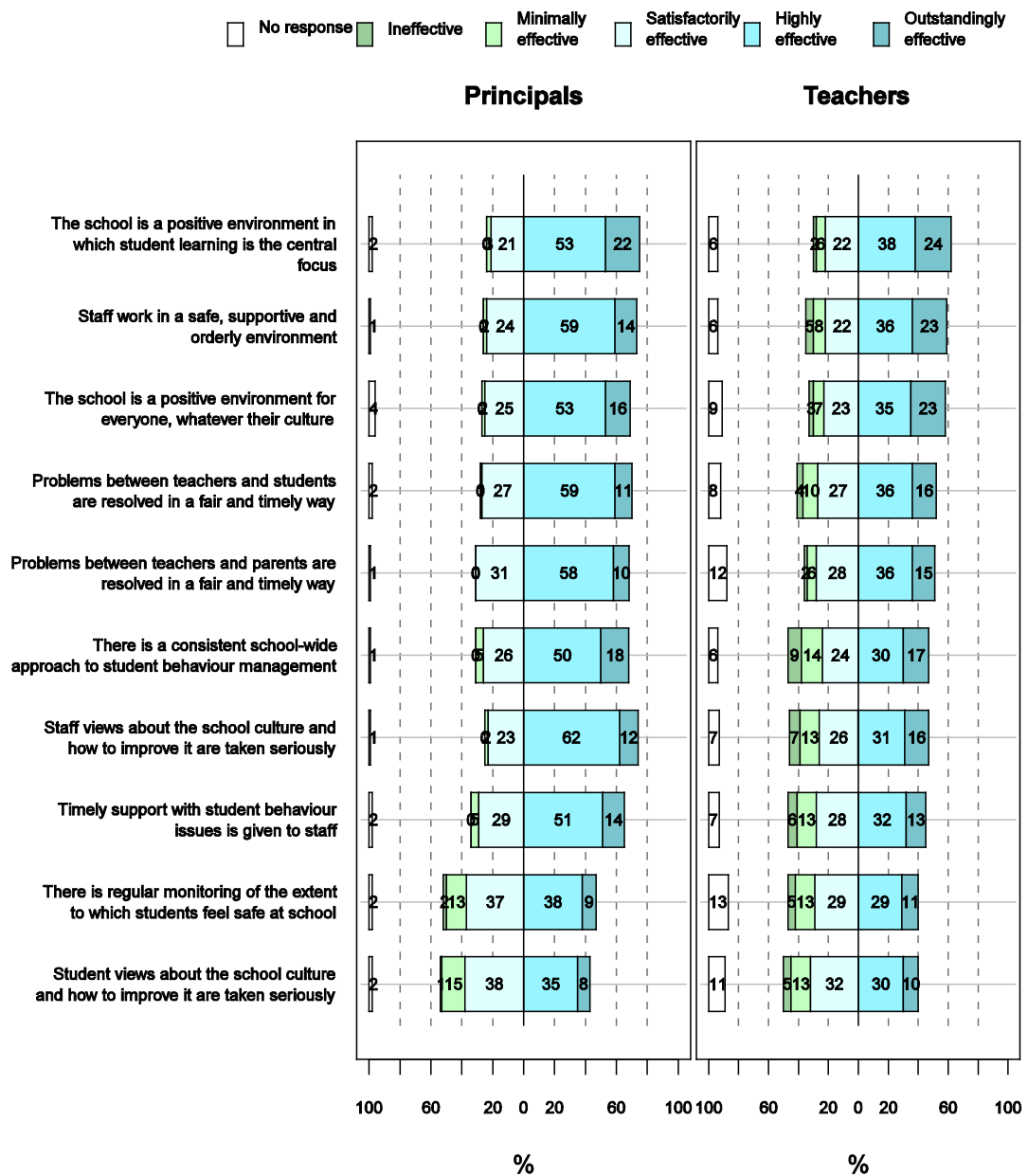
Figure 13 EPD schools—range of scores for Safe and Orderly Environment



Principals’ average highly or outstandingly effective score on the items on this scale was 65 percent, and for teachers across schools the average such score was 50 percent. On this scale, Safe and Orderly Environment, we see the widest difference of views of the effectiveness of school leadership between the two groups. Principals are much more likely to rate school leadership as highly or outstandingly effective for nine of the 10 items on this scale; the two groups do have

similar views in relation to the use of student views about school culture. When we compare principal and school views, we see more similarity, though principals give higher ratings to six of the 10 items; they do give lower ratings with regard to the item *the school is a positive environment for everyone, whatever their culture*.

Figure 14 **Safe and Orderly Environment—principal and teacher views**

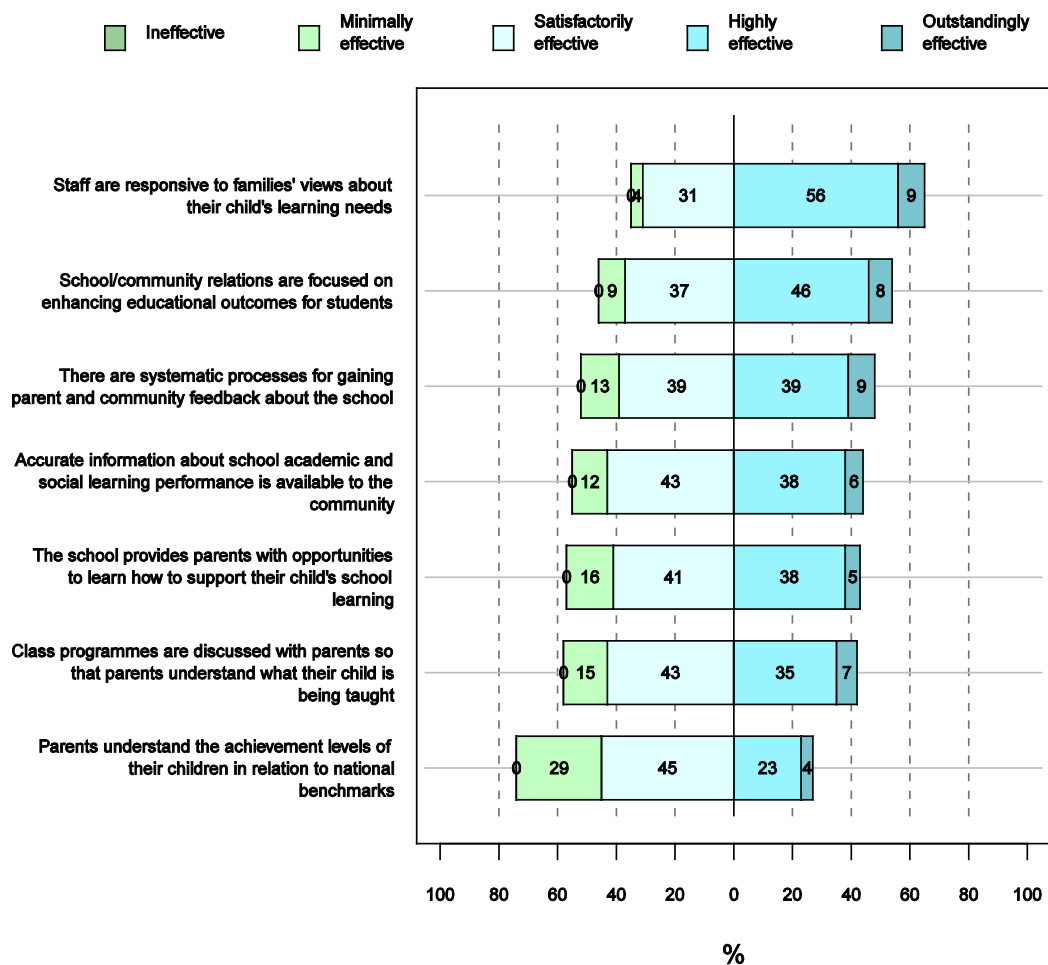


Educationally Powerful Connections with Family, Whānau and Community

On average, 46 percent of the EPD schools rated their school leadership in relation to ensuring that the school was making **educationally powerful connections with family, whānau and**

community as highly or outstandingly effective.¹⁹ Almost two-thirds of the schools gave this rating of the effectiveness of the school leadership in ensuring that staff were responsive to families' views about their child's learning needs. At the other end of the spectrum, only 27 percent of schools thought that their school leadership was effective in ensuring that parents understand the achievement levels of their children in relation to national benchmarks. This proportion was the same for principals.

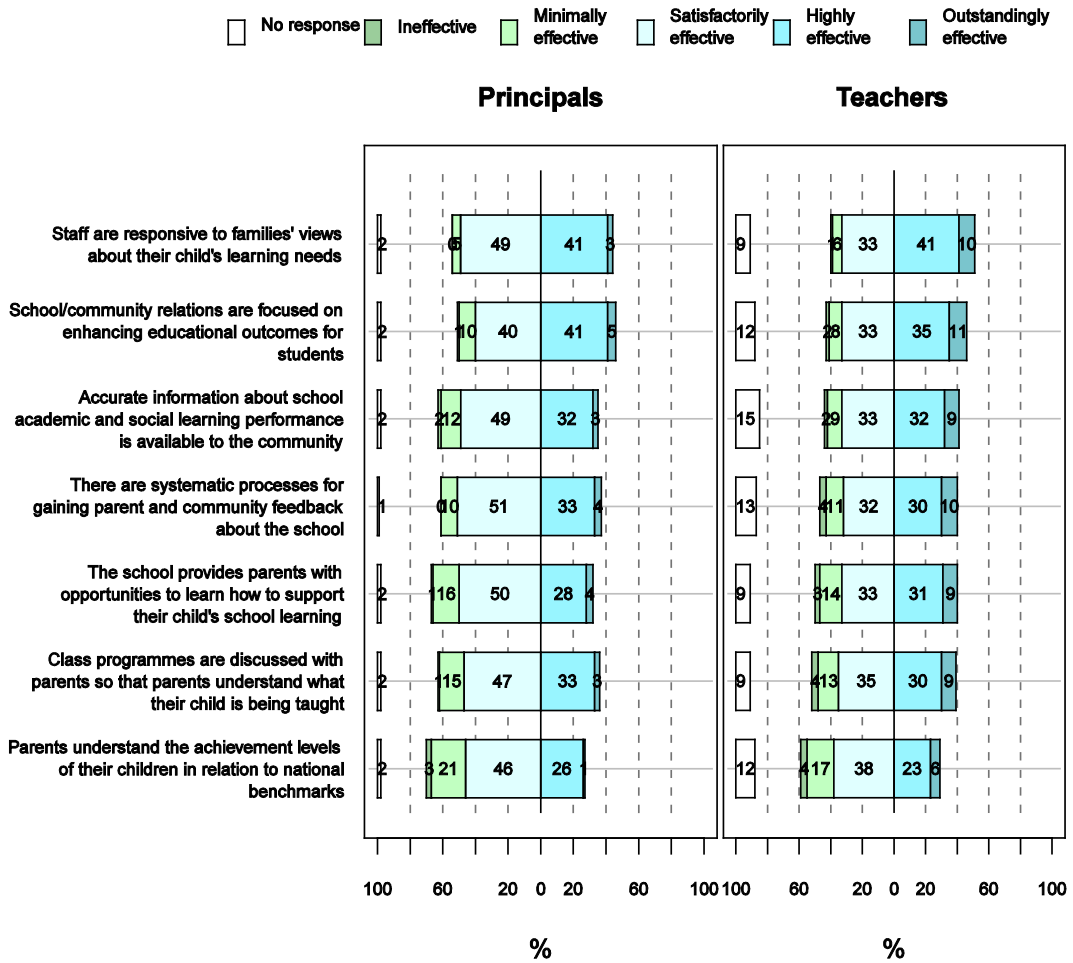
Figure 15 **EPD schools—range of scores for Educationally Powerful Connections with Family, Whānau and Community**



Principals' average highly or outstandingly effective score on the items on this scale was 37 percent. Teachers' across schools' average such score was 47 percent. Teachers had a higher proportion than principals giving highly or outstandingly effective scores for four of the items, and the two groups had similar proportions for three of the items.

¹⁹ Personal observations were the major source of ratings for the **Educationally Powerful Connections with Family, Whānau and Community** scale, with around 20 percent of teachers and around 40–50 percent of principals (also) mentioning other sources.

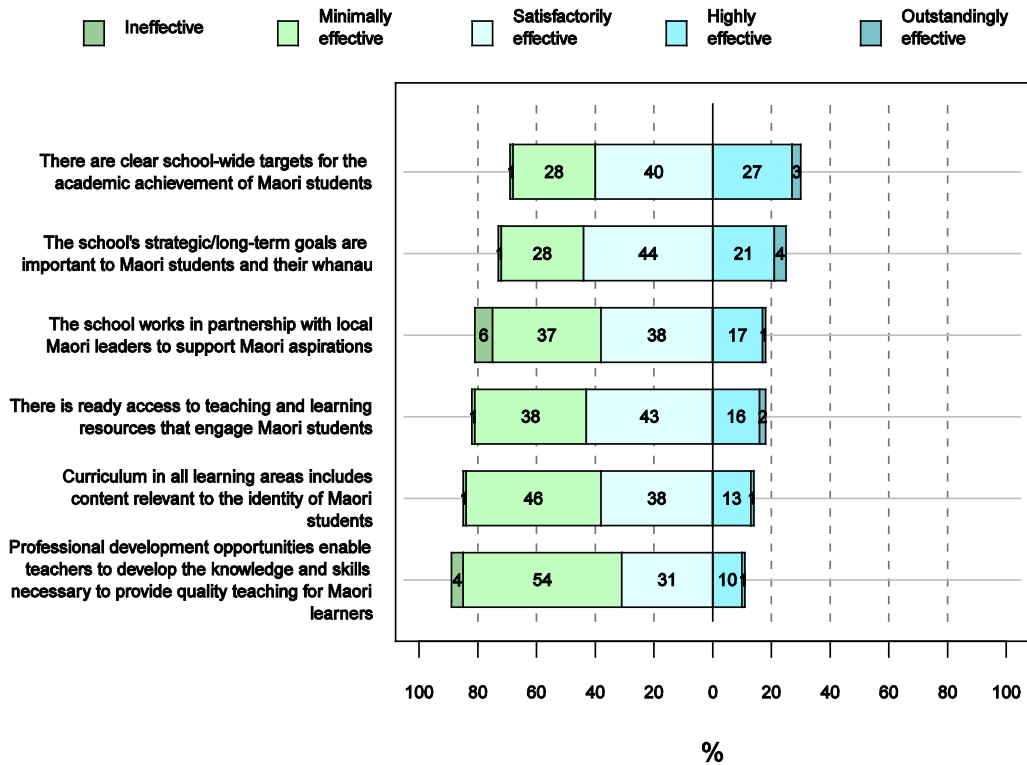
Figure 16 **Educationally Powerful Connections with Family, Whānau and Community—principal and teacher views**



Māori Success

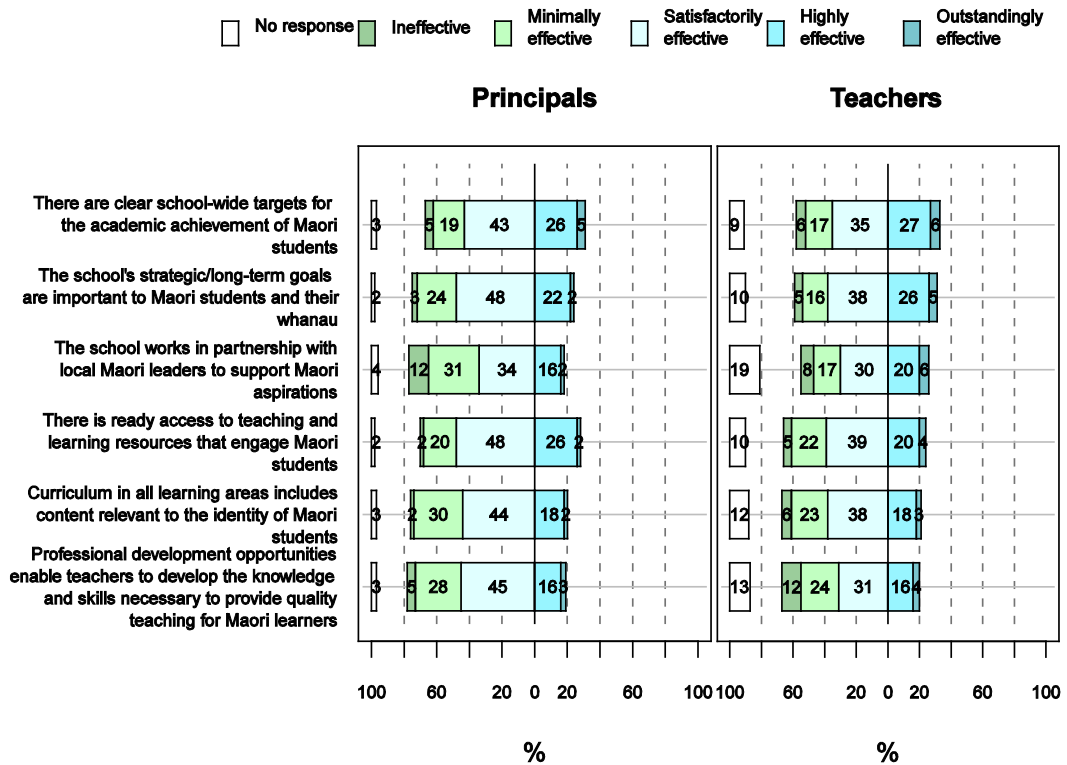
On average, only 20 percent of the EPD schools rated their school leadership highly or outstandingly effective in relation to the items that made up the **Māori Success** scale. There was also a reasonably high nonresponse rate to these items. Schools were most likely to rate their school leadership as highly or outstandingly effective in relation to having clear school-wide targets for the academic achievement of Māori students (30 percent), and least likely to rate them so for ensuring that there were *professional development opportunities that enabled teachers to develop the knowledge and skills necessary to provide quality teaching for Māori learners* (10 percent).

Figure 17 EPD schools—range of scores for Māori Success



Principals' and schools' rating of the Māori success school leadership practices as highly or outstandingly effective was similar for three of the six items asked about; principals were more sanguine about provision of relevant professional development opportunities, that the curriculum included content relevant to Māori student identity and that there was ready access to relevant teaching and learning resources for Māori students. But their average highly or outstandingly effective rating for Māori success school leadership practices was also low, 23 percent. Teachers' average such rating was 25 percent; their views were similar to principals' for three items; lower in relation to access to relevant teaching and learning materials, and higher in relation to the school's strategic goals being important to Māori students and their whānau, and that the school worked in partnership with local Māori leaders to support Māori aspirations.

Figure 18 Māori Success—principal and teacher views



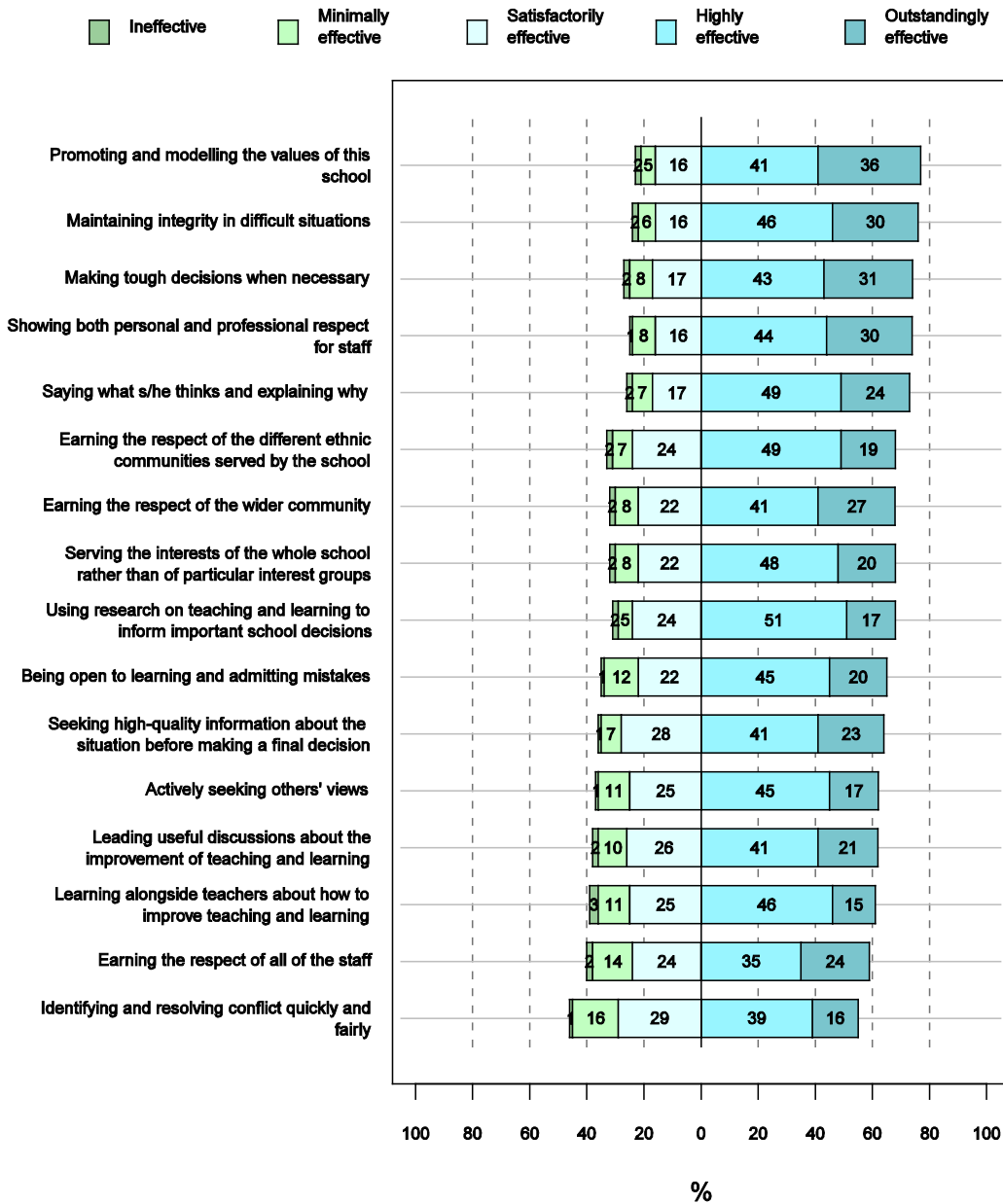
While the school leadership practices related to *Māori Success* items did not correlate as well with the other scales included in the school leadership scale, there is a reasonable degree of similarity in school performance on the latter and the *Māori Success* scale. When we cross-tabulated the four levels of school performance in relation to leadership practices for Māori success, we found that very few of the schools with (relatively) high levels on the *Māori Success* scale were performing at low or low to medium levels on the seven educational leadership scales and the overall leadership scale. Most were to be also found at the high level for the other scales. Conversely, only one of the schools with low scores on the *Māori Success* scale scored highly on the seven educational leadership scales and the overall leadership scale, though there were some that did score at the medium-high level (ranging from 17 percent for *Quality Teaching* and *Educationally Powerful Connections with Family, Whānau and Community*, to 33 percent for *Strategic Resourcing*).

Principal Leadership

On average, 63 percent of the EPD schools rated their principal as highly or outstandingly effective in relation to the items that made up the **Principal Leadership** scale. The items at the top of the spectrum were mostly related to integrity and gaining others’ respect, and included making tough decisions when necessary (74–77 percent). Identifying and resolving conflict

quickly and fairly was the item with the lowest proportion of schools rating their principal as showing highly or outstandingly effective leadership (55 percent).

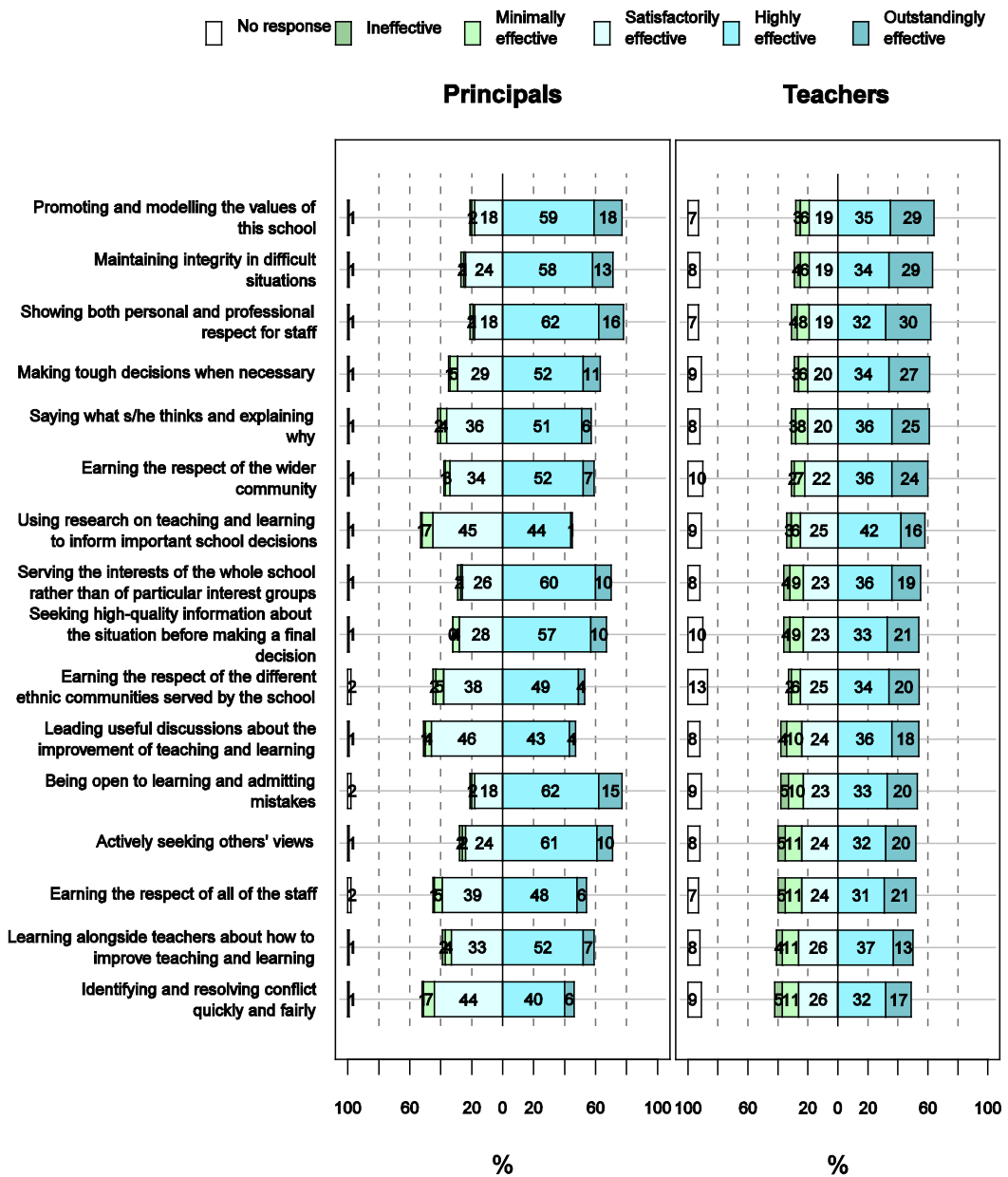
Figure 19 EPD schools—range of scores for Principal Leadership



Principals rated their own leadership as highly or outstandingly effective on average 63 percent also—and they were much less likely to use the outstandingly effective rating (this may indicate some humility, some caution in terms of the context of the ELP survey or less of a comparative base than teachers might have). The proportions of school and principals using the highly or outstandingly effective rating was similar for four of the 16 items in this scale, and lower for nine items. The three items where more principals than schools used this rating were their showing professional and personal respect for staff, being open to learning and admitting mistakes and actively seeking others' views.

Teachers across schools gave their principal this high level of rating on average 56 percent, with the proportion of scores at this level all within a narrow range (49 to 64). Comparing principal and teachers as a whole shows similar proportions giving this rating for five of the 16 items, higher proportions of principals giving this high rating for eight of the items and higher proportions of teachers giving the rating for these items: saying what s/he thinks and explaining why; using research on teaching and learning to inform important school decisions; and leading useful discussions about the improvement of teaching and learning.

Figure 20 Principal Leadership—principal and teacher views



We undertook a factor analysis to see whether some items were more closely associated than others—in other words, that scores on these items were more alike than others. We used individual teacher responses for this analysis. We found three factors: one we summarise as “*principal integrity*”; a second we summarise as “*informed decisionmaking*” and a third we summarise as “*focus on improving teaching and learning*”.²⁰ The mean scores were not substantially different for each set of items (3.71, 3.67 and 3.58 respectively), and though the factors are distinct, they are highly correlated, with a slightly lower correlation slightly less for “focus on improving teaching and learning”.

Table 6 Correlation of principal leadership factors

	Informed decision making	Focus on improving teaching and learning
Integrity	r=0.90	r=0.82
Informed decision making	-	r=0.80

Because of this high correlation, we have used overall scores on the scale in our multilevel model, rather than each factor separately.

Context for Pedagogical Leadership

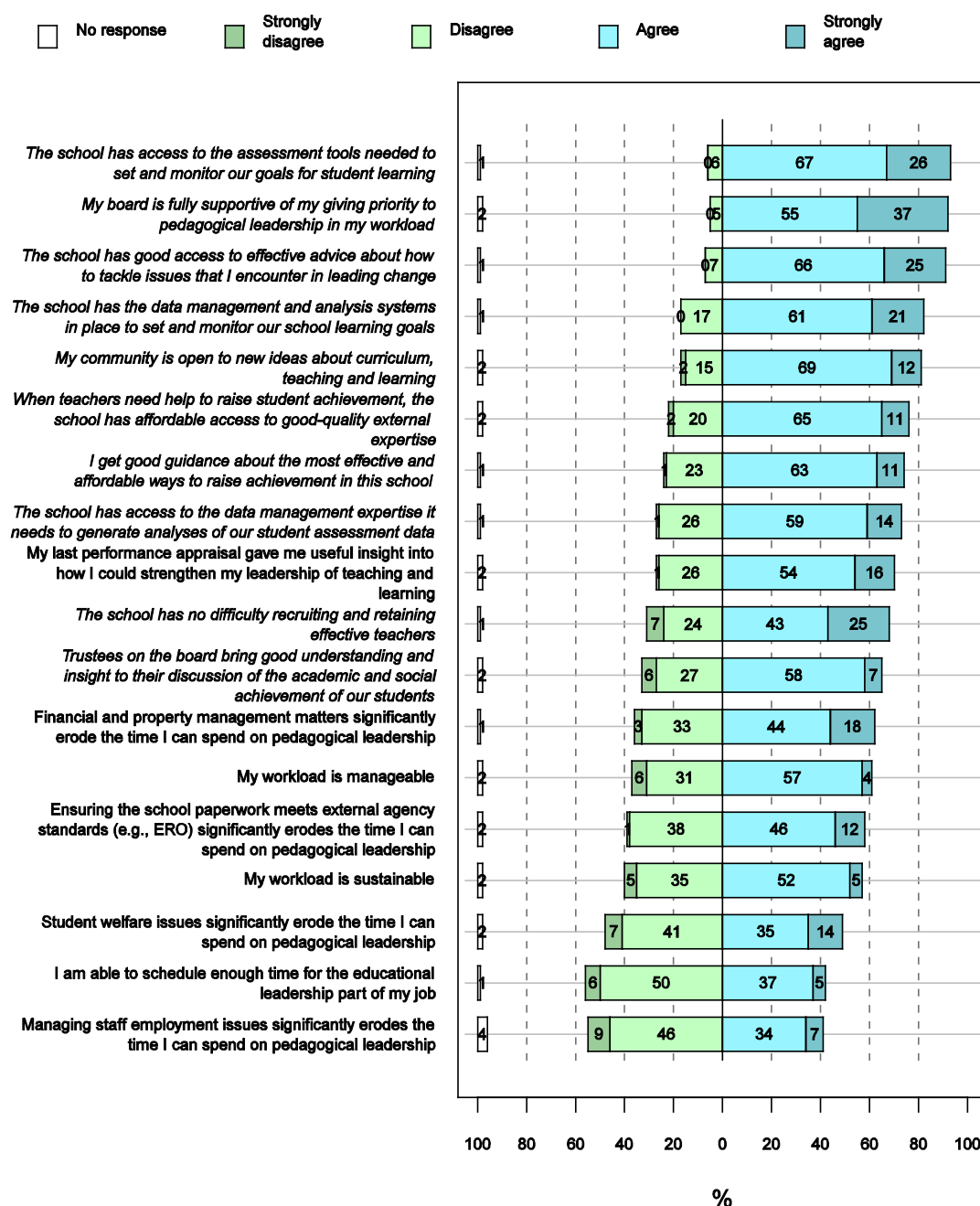
If we want to further develop educational leadership in New Zealand schools, it is also important to know about the supports and constraints that are experienced in the school setting. The context scale built on prior research in this area, particularly other aspects of the principal role in a self-managing system, and incorporating aspects of policy that are intended to support school development, such as principal appraisal and analysis of student achievement data. Principals were asked to rate their agreement with 17 items, using a 4-point scale. Figure 21 shows their responses. Principals were more likely to agree than strongly agree with the items.

We did a factor analysis so that this scale was more easily used in the multilevel modelling reported in Section 4. We found two factors: one we summarise as “*support*”, and the other as “*barriers to pedagogical leadership*”. The items included in the “*support*” factor are italicised in Figure 21.

²⁰ Items in this factor are: earning the respect of all staff, of the different ethnic communities served by the school and of the wider community; promoting and modelling the school’s values, showing both personal and professional respect for staff; maintaining integrity in difficult situations, serving the interests of the whole school rather than particular interest groups and identifying and resolving conflict quickly and fairly. Items making up the “informed decisionmaking” factor were: seeking high-quality information about the situation before making final decision; actively seeking the views of others; making tough decisions when necessary; open to learning and admitting mistakes, saying what I think and explaining why. Items making up the “focus on improving teaching and learning” are leading useful discussions about the improvement of teaching and learning, learning alongside teachers about how to improve teaching and learning and using research on teaching and learning to inform important school decisions.

Seven percent of the principals had low levels of *support*, 72 percent had medium levels of support and 20 percent had high levels of support. Five percent had low levels of *barriers to pedagogical leadership*, 40 percent had low to medium levels, 47 percent medium to high levels and 7 percent, high levels of barriers to pedagogical leadership.

Figure 21 **Context for Pedagogical Leadership—Principal scores**



If we look at strong agreement and agreement combined, we see that there are high levels of confidence among the principals selected for the EPD in some areas. This is particularly evident around assessment tools and analysis: 92 percent agreed or strongly agreed that their school has

access to assessment tools (92 percent) and data management and analysis systems (80 percent), and expertise needed to monitor student learning goals (71 percent). There are also high levels of confidence about access to advice and guidance (highest in relation to encountering change, 89 percent; 77 percent in relation to raising student achievement; and 73 percent in relation to guidance about the most effective and affordable ways to raise achievement in their school). Support from their board to give priority to pedagogical leadership in the principal workload is also high (91 percent), and 70 percent of principals thought their last performance appraisal gave them useful insight into how they could strengthen their leadership of teaching and learning (but this means that the annual appraisal had not been a useful source of ongoing development in relation to school development for 30 percent of the principals). Sixty-four percent of the principals thought their school board brought good understanding and insight to their discussion of student achievement (but this means that this was not occurring in 36 percent of the schools).

Community openness to new ideas about curriculum, teaching and learning was apparent to 80 percent of the principals (meaning that around 20 percent would have to work hard to convince their community of the need for change).

Sixty-nine percent of the principals said they had no difficulty recruiting and retaining effective teachers; but this is an issue for 31 percent of the schools in the EPD.

Sixty percent of the principals thought their workload was manageable, and 56 percent that it was sustainable. This leaves 40–44 percent of the EPD group who are struggling with workloads.

And although boards are supportive of principals giving priority to pedagogical leadership in their workload, only 42 percent of the EPD principals thought they could in fact schedule enough time for the educational leadership part of their job: the other requirements of their role also needed attention and seemed to erode the time for pedagogical leadership: finance and property matters (61 percent); paperwork for external agencies (59 percent); student welfare issues (48 percent); and staff employment issues (41 percent). These other requirements are all legitimate aspects of the role of the leader of an organisation, and cannot be ignored if a school is to remain viable and accountable. The multifaceted responsibilities of a principal's role reinforce the need to develop leadership capacity among staff.

Overall, we do see some marked constraints experienced by a significant minority of principals taking part in the EPD programme on their being able to focus on pedagogical leadership. These constraints are most evident in relation to the size and composition of their workload, followed by teacher recruitment and retention, school governance capability in this area, and expertise related to analysis of student achievement data and guidance about the most effective and affordable ways to raise student achievement.

3. School and principal characteristics: Do they make a difference to school leadership scores?

To see whether school characteristics are associated with different levels of performance on the school leadership scales, we divided the schools into four categories²¹ on the basis of the patterns of distribution across all the seven scales making up the overall scale, and separately for the Māori Success, Principal Leadership and Contexts for Pedagogical Leadership scales, and then cross-tabulated these four categories with school characteristics, and also with length of principal experience and length of experience in their current school. We also looked at whether the 10 different EPD providers were serving markedly different groups in terms of the seven scales. The differences we found are summarised below.

ELP leadership scales

School characteristics

Socioeconomic decile

School decile is clearly associated with differences in EPD school scores on all the ELP scales. The main patterns are:

Deciles 9–10 schools are most likely to be found in the medium-high and high levels on the ELP scales; 84 percent of deciles 9–10 schools were at these two levels for the overall educational leadership scale, cf. 58 percent of deciles 1–8 schools.

Deciles 1–2 schools were more likely to be found in the low level on the ELP scale: 29 percent were at the low level for the overall educational leadership scale, cf. 8 percent of deciles 3–10 schools.

School type

Almost all the schools (95 or 96 percent) at the high level on the ELP scales were primary schools. Conversely, secondary schools, which were 16 percent of the EPD schools, counted for

²¹ The “low” category had leadership scale scores at the school level of under 47, the “low to medium” category had scores of 47 to 54.99, the “medium to high” category had scores of 55 to 63.99 and the “high” category had scores of 64 or more.

between 44–54 percent of those at the low level of the ELP scale for five of the seven scales, and for 31 percent of those for the *Quality Teaching* scale, and 36 percent of those at the low level for *Safe and Orderly Environment*.

Intermediate schools were more likely than primary schools to have low or low-medium scores; and composite schools were between intermediate and secondary schools.²²

Location

Rural schools were more likely to be high-scoring schools on the ELP scales: 37 percent of rural schools were at the high level for the overall scale, cf. 21 percent of urban schools. There were more urban schools at the low level (12 percent overall, cf. 6 percent of rural schools). The difference at the high level was not apparent on the *Strengthening Educationally Powerful Connections with Family, Whānau and Community* scale.

Size

The smallest schools were more likely to be among the high scorers on the ELP scales: 43 percent on the overall school leadership scale; there was not much difference between the U3 and U4, and the U5 and U6 schools (27 percent and 24 percent respectively were among the high scorers); and the U7 schools—most of which were secondary schools—were least likely to be among the high scorers (2 percent). This pattern was found in reverse for the low-scoring schools for some of the scales, but not all. While the U7+ schools had the highest proportion in the low-scoring group for all the scales bar *Quality Teaching*, the proportions of the other size groups in the low-scoring group were similar for *Goal Setting, Teacher Learning and Development* and *Strengthening Educationally Powerful Connections with Family, Whānau and Community*.

These differences in school characteristics suggest that teacher views of school leadership are likely to be lower where the school organisation is more complex—as it is in secondary and larger schools; or where the challenges of the student population are greater—as they are in deciles 1–2 schools, and in secondary schools. The difference we see between rural and urban is likely to reflect differences in these other school characteristics—there are more low-decile, larger and secondary schools that are in urban locations.

Principal experience

There is no association between length of principal experience and school leadership scores (i.e., we do not find that the longer a principal's experience in the role, the higher are their school's school leadership scores). Schools with principals who had been at their school for 15 years or more tended to have a higher proportion in the high-scoring group, but some care needs to be taken in assuming that principal experience may account for the difference, since this is a small

²² We do not report material for the two kura, since the numbers are so small that each might be identifiable; our undertaking to the schools taking part in the ELP Survey is that no individual school will be identifiable in the overall reports of the trends on the ELP Survey.

group (n=19), and they were more likely than other principals to be in primary and U1 schools, where we have seen higher scores.

EPD provider

There are some trends evident for the groups that each provider is working with, though also caveats around making too much of these trends, given that some of the providers are working with small numbers of schools, and it is the providers with the smallest number of schools who show as different from the average. The providers with higher proportions of medium to high and high-scoring schools on the school leadership scales are CORE-Ed, Tim White consultants, e-Time and Accent Learning. Providers with the lowest proportion of the medium to high and high-scoring schools are John Carlyon, and Alison and Bruce Collett.

Māori Success

School characteristics

The schools that had high scores on this school leadership scale (relative to the other EPD schools), were more likely to be small (46 percent of the U1 and U2 schools were in this bracket, decreasing to 7 percent of U7+ schools), rural (39 percent of rural schools, cf. 16 percent of urban schools), with a high proportion of Māori enrolment²³ (30 percent, cf. 14 percent of those with low Māori enrolment) and primary (24 percent, cf. 13 percent intermediate schools, 14 percent composite schools and 9 percent secondary schools). Generally, we see the proportions of schools in the high bracket increase as the proportion of Māori enrolment increases. We do not see such trends, however, in relation to the item about working in partnership with local Māori leaders to support Māori aspirations.

Principal experience

There is no association between length of principal experience and Māori success school leadership scores. There is a trend evident in relation to years of experience at the current school—a higher proportion of schools with principals with longer experience are in the high-scoring group, but it is not statistically significant.

²³ To look at trends related to the proportion of Māori enrolment in a school, we use the groupings less than 8 percent of the roll are Māori—“low Māori enrolment”, 8–14 percent of the roll, 15–30 percent and 31 percent or more of the school roll—“high Māori enrolment”.

EPD provider

Schools working with the University of Waikato were more likely than others to have medium-high or high scores on this scale; and schools working with Accent Learning and Auckland Uniservices, less likely.

Principal Leadership

School characteristics

The larger the school, the less likely it was that teaching staff would give the principal high ratings. Only 5 percent of U7+ schools were in the high-rating category, cf. 38 percent of the U1 and U2 schools, 25 percent of the U3 and U4 schools and 21 percent of the U5 and U6 schools. Primary schools were also more likely to give high scores to their principal (28 percent, cf. 6 percent for intermediate principals, no composite principals and 9 percent of secondary principals). High scores were also more likely in rural schools (39 percent, cf. 16 percent of urban schools). Decile showed something of a trend for higher scores in deciles 7–10 schools, but this was not statistically significant.

Principal experience

There is no association between length of principal experience and school views of their principal leadership scores. Principals with more than 15 years' experience at their current school were more likely to have high ratings (37 percent, cf. 21 percent), though this was a small group (n=17).

EPD Provider

Schools working with UC Education Plus, Core-Ed and Tim White Consultants were more likely than others to have medium-high or high scores on the principal leadership scale; and schools working with John Carlyon and, to a lesser extent, Massey University and Alison and Bruce Collett, less likely.

Context for principal pedagogical leadership

School characteristics

Do principals at schools of different size, type and location, or with different student intakes in terms of family resources (school decile), have different experiences of the context for their pedagogical leadership? We cross-tabulated each item against categories of these four main school characteristics. The short answer is that, on the whole, there were few trends, with most differences evident in relation to school decile and location.

Socioeconomic decile

We found that there were no decile-related differences evident in terms of external support, assessment and improvement advice, or governance. Nor are they evident in relation to some of the persistent concerns of principals: funding and paperwork for external agencies are just as likely to be seen as eroding time for pedagogical leadership in deciles 9–10 schools, the schools serving the fewest poor families, as they are in deciles 1–2 schools, the schools serving the highest proportions of poor families.

It is the capacity and student issues at the school level that make for some differences. EPD principals of deciles 1–2 schools are much more likely than other EPD principals to report difficulty in recruiting and retaining effective teachers (67 percent, cf. 35 percent of deciles 3–4 principals, and falling to 14 percent of deciles 9–10 principals). Seventy-four percent of deciles 1–2 principals saw student welfare issues eroding their time for pedagogical leadership, cf. 53 percent of deciles 3–8 principals, and 21 percent of deciles 9–10 principals. Managing staff was also a source of erosion of time for pedagogical leadership for deciles 1–2 principals more than others, but the contrast was less stark (57 percent, cf. 35 percent of deciles 3–8 principals, and 44 percent of deciles 9–10 principals).

Twenty-two percent of deciles 1–4 principals also thought that their communities seemed somewhat less open to new ideas about curriculum, teaching and learning (cf. 12 percent of principals of deciles 7–10 schools).

School size

We used the U-grade of the principal to analyse school size, creating four categories, grouping U1 and U2 schools together, U3 and U4 schools, U5 and U6 schools, and U7+ schools.

Principal views of their school context show only two differences related to school size. The feeling that staff management erodes time for pedagogical leadership does increase—from 22 percent of U1 and U2 principals to 70 percent of U7+ principals. U1 and U2 principals were least likely to say, however, that they could schedule enough time for educational leadership in their job (28 percent, cf. 46 percent of U3–6 principals, and 39 percent of U7+ principals).

School type

Secondary principals were most likely to report that managing staff eroded their time for pedagogical leadership (69 percent, cf. 50 percent of intermediate and composite school principals, and 34 percent of primary principals). They were also somewhat less likely to agree that their workload was manageable (49 percent, cf. 64 percent of primary principals, 59 percent of intermediate principals and 57 percent of composite school principals), or sustainable (40 percent, cf. 63 percent of primary principals, 64 percent of intermediate principals) but composite school principals were least likely to think their workload sustainable: 14 percent.

Location

Rural principals were more likely than those in urban areas to say that paperwork for external agencies eroded their time for pedagogical leadership (69 percent, cf. 56 percent). Rural principals were less likely to say they could schedule enough time for educational leadership (31 percent, cf. 46 percent of urban principals), that they had access to the data management expertise for analysis of their student assessment data (61 percent, cf. 75 percent of urban principals) and that their board brought good understanding to their discussions of student achievement (51 percent, cf. 69 percent of urban principals).

EPD provider

Waikato University had the highest proportion of principals whose support factor (from the pedagogical leadership context) scores were high (30 percent, cf. 20 percent on average), and John Carlyon, Core-Ed and Alison and Tim Collett, the lowest proportion of principals with high scores on the support factor. These last three providers also had the highest proportion of principals with high scores on the barriers to pedagogical leadership factor. The rest of the providers were clustered around the average score for the barriers factor.

Principal experience

Do principals with longer experience in the role have a more supportive context, and are they able to manage other aspects of their role in ways that allow them to have time for pedagogical leadership?

We did find that principals with more than 15 years' of experience were less likely to say that managing staff eroded their time for pedagogical leadership (26 percent, cf. 42 percent of those with 11–15 years' experience), and that principals with five or less years' experience were less likely to think they had access to data management expertise with regard to student assessment data (50 percent, cf. 83 percent of those with 15 or more years' experience as a principal). But otherwise, years of experience as a principal does not affect views of school context, including manageability or sustainability of workload.

While school characteristics do not have a strong influence on principal views of their school context—with some important exceptions—knowledge of a particular school, its students, staff and community, may influence principal views of the context for their pedagogical leadership. What about years as principal at the current school? There were no trends evident here.

4. What factors account most for differences in school leadership scores?

To see which factors seem to account most for differences between schools in their school leadership scores, we used multilevel models. These multilevel models are not based on the average teacher scores we have used so far, but allow us to use individual teachers' actual scores, "nested" within their school. This means we can use the full range of scores in a school. The statistical software we used for this modelling was MLwiN version 2.10. In a series of exploratory models, we included the school characteristics, teacher variables and principal variables included in the survey to see which of these appeared to account for some of the difference (variability) in school scores. This exploratory work enabled us to identify a set of variables that appeared to account for some of the differences in school scores, that we could include in the models reported here. We tested three-level models (teachers nested in schools nested in providers) but the differences between providers were not statistically significant, so we used two-level models (teachers nested in schools). The length of principal experience (in total and in their current school) and previous experience did not show statistically significant association with the overall leadership scale score, and so were not included in the models.

In the exploratory models, we included all seven educational leadership scales and the overall leadership scale. Because of the high intercorrelation of the scales, we decided for this report to focus on just the overall leadership scale.

We start with the null model, which simply includes the range of school leadership scores for each school, and estimates the proportion of the variance between school scores that remains unaccounted for. We needed first to check the assumptions underlying our model.

A common way to check that the assumptions underlying the models are met is to calculate and then plot "residuals", or the difference between the measured value and what the model would have predicted. Plots of residuals at both levels (teacher and school)²⁴ showed no marked departures from what would be expected, and few problems with one or more points with too much "leverage" (or influence on the model, in the sense that the fitted values would change markedly if the individual teacher or school were excluded from the model).

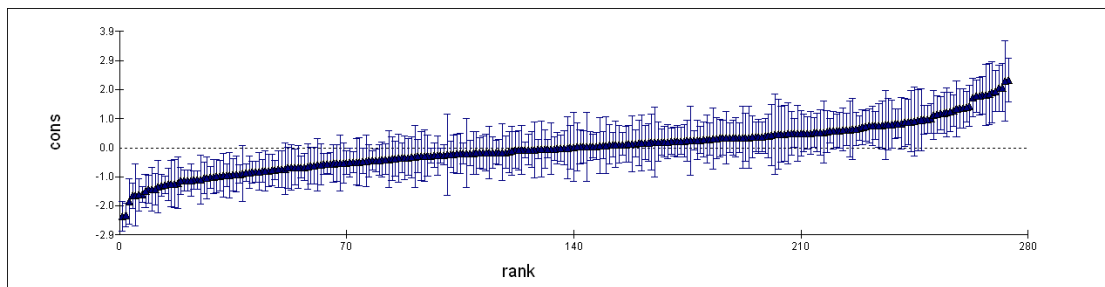
A commonly used plot of residuals, to get an image of the differences between schools is the "caterpillar plot" where the residuals are arranged in ascending order, and then plotted with 95

²⁴ At the teacher level, the residual is the difference between the scale score and the score predicted or estimated by the model. At the school level, the residual is based on the mean of the residuals for the teachers in the school, but takes into account the structure (clustering of teachers within schools) of the data.

percent confidence intervals. In Figure 22 the residuals for overall scale with the null model fitted are shown. The horizontal dotted line through 0 indicates a perfect match between the scale score for the school and the predicted value. The schools represented on the left of the graph, where the residual is below 0, are those where the observed value was lower than the predicted value (the approximately 40 to 50 schools that had less effective leadership), and those represented on the right of the graph (residuals above 0) are those where the observed value was higher than the predicted value (the approximately 30 to 40 schools that had more effective leadership). Those significantly below or above 0 have confidence intervals that do not cross the horizontal dotted line.

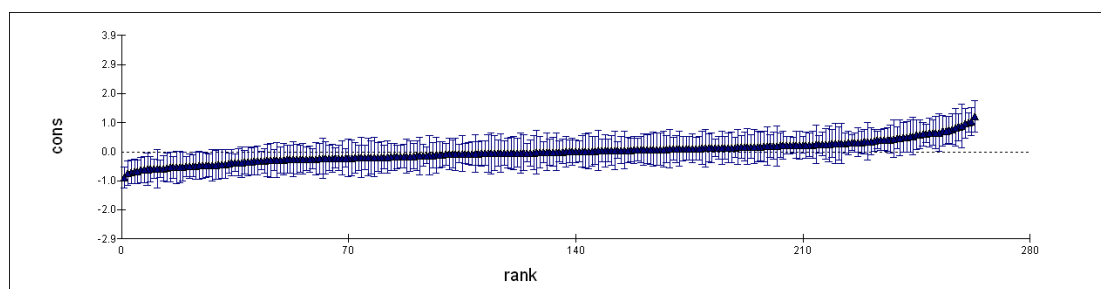
If we take no school or individual teacher information into account, around 60 schools (21 percent) had scores below the average, and 90 schools (32 percent) scores above the average predicted by the model. The extremes of the plot show relatively steep increases in residual between adjacently ranked schools, compared to the schools in the middle of the plot, where there is very little difference between adjacently ranked schools. This model leaves 36 percent of the variance between schools unaccounted for.

Figure 22 School-level residuals for the overall school leadership scale, null model



After we added relevant school characteristics; teacher characteristics, teacher morale, workplace experience and view of their principal's leadership, and the principal's views of their context for pedagogical leadership to the model, the residual plot for the same scale shows much less variability between schools (Figure 23). In this plot there are between 10 and 15 schools in each of the extremes, doing better or worse than expected, and the slope in the two tails is much less marked. The height of the error bars is also decreased, as the information used in the model is able to explain quite a lot of the variation in scale score between individual teachers. The proportion of variance left unaccounted for has now gone down to 17.8 percent.

Figure 23 **School-level residuals for the overall school leadership scale, full model**



What these graphs and the underlying models tell us, is that differences in school leadership among the EPD schools do exist at the start of their EPD work. These differences are on a continuum, with only around 10 percent of the EPD schools showing very different scores from most (either very low or very high) once we have taken relevant factors into account.

Do some factors carry more “weight” than others in accounting for differences between schools?

Table 7 shows how the factors that showed associations in the exploratory models appear to be related to differences between the EPD schools, in terms of changing the proportion of variance left unaccounted for (at the bottom of the table), and in terms of the difference they make to the mean score for the reference group in each model. Statistically significant differences are given in bold; and the standard deviation of each change in score is given alongside.

These reference groups are the groups that showed the lowest average scores. In the teacher characteristics model, it is for a Pākehā teacher with more than 15 years’ experience. In the teacher workplace model, it is a teacher with low morale, who strongly disagrees they have a positive workplace experience, and who does not think the principal’s leadership is effective. In the school characteristics model, it is a deciles 1–2 school, or a secondary school. In the principal leadership context model, the reference category is of teachers in a school where the principal strongly disagrees that they have sufficient time for the pedagogical leadership part of their job and who disagrees that they have access to effective teachers, advice, support and expertise needed. In the full model, it is for a teacher having all the characteristics described for each of the separate models.

The teacher model actually increases the proportion of unexplained variance to 38.4. This is to be expected, as the model reduces variance at the teacher level, with the result that the school level variance is increased. It shows that the overall school leadership score is likely to be higher if

judged by a probationary teacher (with less than two years' experience), or by Pasifika and Asian teachers.²⁵

The teacher workplace model decreases the unaccounted variance between schools from 36 to 27.5, and shows that overall school leadership scores were indeed higher if judged by teachers who have good morale, and positive or not strongly negative workplace experiences; and the scores were higher again if judged by teachers who rated their principal's individual leadership as outstandingly effective. The school characteristics model decreases the unaccounted variance between school leadership scores to 27.8, showing increases related to increases in school decile (in two "lumps" rather than a steady rise), and for primary teachers. The context for the pedagogical leadership model drops the variance left unaccounted for to 33.2; scores decrease for those in schools whose principals had high scores for their perceived barriers to pedagogical leadership, and increase for those in schools whose principals thought they had high levels of support.

The overall model brings all these together, and the overlap between some of the variables means that the size of their contribution may change, and no longer be significant. Teacher views of the principal's individual leadership, school decile, type, teacher morale and workplace experience, teacher ethnicity and the support principals perceive for the pedagogical leadership aspect of their role remain significant.

²⁵ Perhaps new teachers are most positive because they have less to compare with; we have some caveats around the ethnic differences, which may simply reflect differences in the size of these groups, cf. the majority Pākehā, or differences in assumptions about school practices (we do not know if there are in fact such differences).

Table 7 **Multilevel models of relevant factors accounting for differences in EPD schools' overall school leadership score**

Variables	Null model	Teacher model	Teacher work-place model	School characteristics model	Principal pedagogical context model	Full model
Reference category mean	58.0(0.6)	58.1(0.6)	42.5(0.6)	34.3(2.3)	45.5(1.7)	33.5(2.4)
Years' teaching experience	0–2 years	1.5(0.6)				-0.2(0.5)
	3–5 years	-1.7(0.6)				-0.8(0.4)
	6–10 years	-1.9(0.5)				-1.0(0.4)
	11–15 years	-1.8(0.6)				-1.7(0.4)
Ethnicity	Māori	1.2(0.7)				0.5(0.5)
	Pasifika	4.2(0.9)				4.5(0.8)
	Asian	2.9(0.7)				3.0(0.7)
	Other	1.9(0.8)				0.9(0.6)
Morale is good	Agree		3.0(0.6)			3.1(0.5)
	Strongly agree		4.0(0.7)			4.0(0.7)
Positive workplace experience	Disagree		1.6(0.6)			1.5(0.6)
	Agree		2.3(0.4)			2.1(0.4)
Effectiveness of principal's leadership	Strongly agree		5.6(0.6)			5.7(0.6)
	Satisfactorily effective		5.9(0.5)			5.9(0.5)
	Highly effective		10.2(0.4)			10.1(0.4)
	Outstandingly effective		17.9(0.5)			17.7(0.5)
*School decile	3 & 4			4.5(1.6)		2.9(1.1)
	5 & 6			3.4(1.7)		2.6(1.1)
	7 & 8			6.9(1.6)		4.7(1.1)
	9 & 10			6.1(1.6)		4.7(1.1)
*School type	Primary			10.3(1.3)		6.9(0.8)
	Intermediate			6.9(2.2)		4.1(1.4)
	Composite			6.2(3.2)		3.5(1.9)
	Other			3.0(5.7)		3.2(3.5)
Barriers to pedagogical leadership	Disagree				-0.1(2.7)	-0.4(1.6)
	Agree				-2.0(2.7)	-1.1(1.6)
	Strongly agree				-7.0(3.4)	-1.4(2.1)
Support for pedagogical leadership	Agree				3.9(2.3)	1.1(1.4)
	Strongly agree				8.0(2.6)	4.0(1.5)
PVC (%)	36.0	38.4	27.5	27.8	33.2	17.8
<i>n</i>	4,559	4,230	4,239	4,559	4,541	4,193

* School level variables. Statistically significant differences from the reference category are given in bold.

This model of the variables that account for a reasonable proportion of the variance in overall school leadership scores does not provide a causal account—and some of the variables would not operate in a unidirectional fashion. For example, teachers' view of their principal's individual leadership may colour their views of the wider school leadership practices—but those views of practices may also enter into their judgements of their principal. Morale and positive workplaces are likely to be the result of good school leadership practices—but they also provide a fertile ground in which to build and sustain those practices.

The variables in this final model do provide some evidence of contextual factors that appear to have a bearing on school perceptions of the quality of educational leadership practice—particularly school decile, type and, to a lesser extent, the support for pedagogical leadership (and barriers to its exercise). They also provide some indicators that the school leadership practices covered in the ELP have positive links with teacher morale, good workplace practices and judgements of principal quality.

5. Conclusion

In this conclusion, we focus on the implications of the patterns found for the EPD schools that took part in the ELP Survey, for the EPD work and for the Ministry of Education's goal of developing strong educational leadership in every school, to provide some recommendations for consideration.

We have posed ourselves two fundamental questions, and two "what next" questions in relation to the EPD and the ELP:

1. Do the patterns of scores on the ELP indicate that there is a need for focused professional development and support for school leadership?
2. If so, should this professional development and support be particularly targeted in certain aspects of educational leadership, to certain kinds of school or to kinds of leaders?
3. Are there any implications for the EPD in particular?
4. Are there any implications for the ongoing development and use of the ELP?

Before we move to those questions, we summarise the main findings in relation to the ELP scales of school and principal leadership, since these provide the ground for our thinking about the implications of the patterns found.

Summary of main patterns relating to educational leadership levels as indicated by the ELP

There was a wide range of scores on the overall leadership scale (from 33 to 88 units on the educational leadership practices scale), but half the schools scored in the band between 52 and 64 units, with the mean at 58 units. There was a high level of intercorrelation between the scores on each separate aspect and the overall leadership practices score.

Goal Setting, Safe and Orderly Environment and Principal Leadership were the scales that had the highest proportions of schools rating their school leadership as highly or outstandingly effective (60 percent or more). Teacher Learning and Development and Māori Success were the scales that had the lowest proportions of schools rating their school leadership as highly or outstandingly effective (35 percent and 21 percent).

Some key trends in each scale:

Goal Setting: There appears to be more confidence about the role of leadership in relation to schools' guiding frameworks than about the embedding of the goals into ongoing use and evaluation.

Strategic Resourcing: The EPD schools gave highest ratings to the effectiveness of their school leadership in ensuring that the timetable reflected the school's priorities for teaching and learning, and lowest to items related to working with families and communities. In between come items related to teaching resource relevance and availability.

Curriculum Quality: School leadership was seen as most effective in ensuring the systematic monitoring of each student's progress and the existence of assessment plans to collect the information needed to monitor progress on priority learning goals, and least effective in ensuring that rigorous feedback was given to teachers about the quality of their schemes or unit plans, that all students experience challenging programmes and that all curriculum included content relevant to diverse learners.

Quality of Teaching: Just over half the EPD schools thought that their school leadership was highly or outstandingly effective in ensuring that everyone shared responsibility for student learning, that assessment data were used to improve teaching and that those teachers with particular expertise were used in the school to help other teachers' development. The lowest rating item was students provide feedback to teachers on the effectiveness of their teaching, followed by challenge and support to improve teaching for teachers whose students remain disengaged, and early identification and support provided for teachers having difficulty helping students reach important academic and social goals.

Teacher Learning and Development: Open discussion of student results and teachers helping each other develop more effective teaching strategies, serious discussions of how to improve teaching and learning in staff meetings and analysis and use of student achievement patterns to plan professional learning priorities were the items most likely to attract highly or outstandingly effective ratings of school leadership. Schools were less than half as likely to give such ratings to the provision of systematic opportunities to improve teaching through observing effective colleagues at work, and teachers' use of a range of evidence sources to evaluate the effectiveness of their teaching.

Safe and Orderly Environment: Most EPD schools thought they had positive environments for learning, irrespective of culture. The gathering and use of student views in relation to school safety and culture were the two items on which the school leadership was least likely to be rated as effective.

Educationally Powerful Connections with Family, Whānau and Community: Almost two-thirds of the schools thought their leadership was highly or outstandingly effective in ensuring that staff were responsive to families' views about their child's learning needs. At the other end of the spectrum, just over a quarter of schools thought that their school leadership was effective in

ensuring that parents understand the achievement levels of their children in relation to national benchmarks.

Māori Success: Schools were most likely to rate their school leadership as highly or outstandingly effective in relation to having clear school-wide targets for the academic achievement of Māori students, and least likely to rate them so for ensuring that there were professional development opportunities that enabled teachers to develop the knowledge and skills needed to provide quality teaching to Māori learners.

Principal Leadership: The top items in this scale were mostly related to integrity and gaining others' respect, and included making tough decisions when necessary. Identifying and resolving conflict quickly and fairly was the item with the lowest proportion of schools rating their principal as showing highly or outstandingly effective leadership.

Contexts for pedagogical leadership

Seven percent of the principals had low levels of *support*, 72 percent had medium levels of support and 20 percent had high levels of support. Five percent had low levels of *barriers to pedagogical leadership*, 40 percent had low-medium levels, 47 percent medium to high levels and 7 percent, high levels of barriers to pedagogical leadership. Overall, we do see some marked constraints experienced by a significant minority of principals taking part in the EPD programme on their being able to focus on the pedagogical leadership aspect of their role. These constraints are most evident in relation to the size and composition of their workload, followed by teacher recruitment and retention, school governance capability in this area and expertise related to analysis of student achievement data and guidance about the most effective and affordable ways to raise student achievement.

Capacity and student issues were more likely to occur for principals at deciles 1–2 schools. Secondary principals and U7 principals were more likely than others to experience staff management as an erosion of their time for pedagogical leadership, and secondary principals were somewhat less likely to think their workload was manageable or sustainable. Rural principals and U1 and U2 principals were least likely to feel able to schedule enough time for educational leadership, and rural principals indicated some issues around paperwork for external agencies, governance, understanding of student achievement and access to data management expertise.

Years of principal experience, in total, or at the current school, were not associated with views of the school context for pedagogical leadership.

Characteristics related to differences between school scores for educational leadership practices

High-scoring schools on the educational leadership practices scale are most likely to be primary schools, small schools, rural schools and high decile. These differences in school characteristics suggest that teacher views of school leadership effectiveness are likely to be lower where the

school organisation is more complex—as it is in secondary and larger schools; or where the challenges of the student population are greater—as they are in deciles 1–2 schools, and in secondary schools.

Relatively higher scores on the Māori Success school leadership scale were also likely to occur in small schools, rural schools and those with high Māori enrolment.

Principal leadership ratings were related to school size: the lower the school size, the higher the rating. They were also higher in rural schools and primary schools.

Principal experience, either in total or at the current school, was not related to school leadership practices or principal leadership ratings. This underlines the importance of ongoing professional development and learning for principals, since time alone does not make for higher levels of either principal leadership or school leadership.

Different EPD providers had some differences in the profiles of the schools they worked with, but some of the apparent differences may be due to the small size of some providers' groups. Which EPD provider a teacher's principal was working with was not a variable that made it into the multilevel modelling, indicating that the EPD provider groups are not substantially different from each other in terms of ELP scores.

Multilevel modelling showed that some variables do seem to account for much of the difference between schools in their overall school leadership scores. After accounting for these variables, only around 10 percent of the EPD schools showed distinctly different scores (either very low or very high).

The variables that the multilevel modelling found to be associated with differences in school perceptions of the quality of educational leadership practice included contextual factors—particularly school decile, school type and, to a lesser extent, the support for pedagogical leadership (and barriers to its exercise). The modelling also provides some indicators that the school leadership practices covered in the ELP have positive links with teacher morale, good workplace practices and judgements of principal quality.

Implications of ELP patterns in relation to the need for focused professional development and support for school leadership

The analysis shows that the length of principal experience, either in total or at their current school, is not associated with school scores for the effectiveness of either the principal leadership, or the school leadership as a whole. So the New Zealand education system cannot rely on the individual accumulation of experience to either maintain the current levels of educational leadership practices, or develop them further.

We do not yet know whether schools need to be at the high or outstandingly effective levels of educational leadership practices to affect student achievement levels, or whether the “satisfactorily” effective level would be sufficient. So we cannot say that we need all schools to be experiencing high or outstandingly high levels of educational leadership practices in order to make the changes to student performance levels that are aspired to by the Government (the new National Standards are based on achievement progressions over time that are estimated to lead to the gaining of at least Level 2 NCEA).

The current levels of educational leadership practices do indicate that there is room to develop further, given that the existing research shows associations between most of these practices and student achievement.

While there is an association between levels of principal leadership and the levels of school leadership as a whole, the fact that more than half of the teachers taking part in the survey have roles beyond their own classes shows that professional development for others related to these leadership practices is also important if we are going to raise overall levels of school educational leadership. Some of these leadership practices can be thought of as “leadership” per se; others will also be covered in curriculum-related professional development, or in the ongoing ways in which people in schools work together, and deepening those ways of working together.

The associations between educational leadership practice scores and levels of principal perception of support for their pedagogical leadership also raise the policy questions of ensuring that such support is available (e.g., continuing to address issues of teacher supply, and providing guidance for the most effective and affordable ways to raise student achievement).

Should professional development and support for educational leadership be targeted?

The associations with school decile and type—with the ELP scores, and in relation to principal perceptions of support or barriers to their pedagogical leadership—bring up the very real questions of factors beyond individual school control. They also pose real policy issues, given that there is little likelihood of ensuring that we have a more even social mix in our schools (a factor which certainly helps lift overall student performance of children from low-income homes, who are overrepresented among the low performers in education),²⁶ or tackling the complex nature of secondary school organisation. Given this real constraint, if there is any need for prioritisation, deciles 1–2 schools and secondary schools stand out.

²⁶ Causa, O., & Johansson, A. (2009). *Intergenerational Social Mobility*. Paris: OECD. Economics Department Working Papers No. 707; Field, S., Kuczera, M., & Pont, B. (2007). *No more failures. Ten steps to equity in education*. Paris: OECD; Webber, R., & Butler, T. (2006). *Classifying pupils by where they live: How well does this predict variations in their GSCE results?* London: Kings College, CASA Working Paper number 99.

Since there are no clear associations with principal years of experience, years of experience is probably not a strong criterion to use in any prioritisation of professional development or support when it comes to the educational leadership component of the principal's role.

There appears to be most scope for further development in relation to the Teacher Learning scale, and Māori Success; and in terms of practices related to feedback on performance and effectiveness, providing timely challenge and support to both teachers and students, including student voice, and supporting parent understanding of student achievement. It is likely that changing school practices in these areas would also mean changing school practices in other aspects also asked about in the ELP Survey. And different schools would have different immediate challenges or projects for which the ground is well prepared, providing different “routes” into changing practice. So it would seem to us that while these scales and aspects of practice need attention, the form professional development or professional working together would take, would and should vary in different schools.

Implications for the EPD

It would probably be useful to discuss the overall patterns and implications reported here with the EPD providers, particularly around how one might weave together (or “tackle”) several aspects together, or use one aspect as a route to tackle some desired deeper change.

The differences we found related to differences between providers in terms of the group of schools they are working with were not substantial enough to remain as a variable in the multilevel modelling, but they are probably worth discussing with individual providers, alongside other information they have, in terms of their focus, their approach and their experiences of the aspects of their approach that seem to work with schools at different levels on the ELP.

Implications for the ongoing development and use of the ELP

We focus here on development and use at an aggregate level, rather than at the individual school level for formative and self-evaluative purposes.

School characteristics did show some quite marked associations with the ELP levels, even if not all of these remained in the final multilevel model. This means that it is probably desirable to develop some benchmarks for schools with different characteristics—e.g., range and average, or different levels, for secondary schools, for primary schools; for rural schools, cf. urban; and schools of different decile. This could be done if we have a nationally representative sample of schools. The EPD schools do not provide such a sample on their own.

For the purposes of analysis, we have divided the scales into different levels, and described those levels in terms of “height” (low scores, low to medium, medium to high, high). We are interested in feedback on these levels. Ideally, they could form the basis for ongoing analysis of changes in the distribution on the ELP scales of the EPD, and then a regular sample of New Zealand schools

so we can track changes in desired educational leadership practices over time and in relation to policy and other changes that affect school practice.

Finally, the ELP does provide a useful way of gauging and describing school leadership practices that are linked to teaching and learning. We can't tell from the ELP levels alone whether they are high enough to make a real difference to student engagement and performance, or whether there is a minimal level that is necessary to ensure a given level of student engagement and performance. To do that, we would need to also link patterns in ELP scores over time, to patterns in student engagement and performance over time.