Teaching Practices, School Practices, and Principal Leadership:

The first national picture 2017

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This report is available at www.nzcer.org.nz/research/teaching-and-school-practices-survey-tool-tsp

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Summary

New Zealand now has its first national picture of teaching and school practices, and principal leadership in English-medium schools.

The Teaching and School Practices Survey Tool (TSP) is an online survey tool designed for schools and Kāhui Ako to inquire into their teaching, school, and principal leadership practices. The TSP tool was developed in 2017 and made available for use in Terms 2 and 3 of that year. The national picture presented in this report draws on the 2017 aggregated data. The tool was commissioned by the Ministry of Education to provide:

- school-level data that can be used by schools and Kāhui Ako in review and planning to improve teaching and leadership capability
- national data that can be used for evaluating the impact of policy, initially the introduction of Kāhui Ako and changes to professional learning and development.

The items in the TSP draw on robust research evidence about practices that are linked to desirable student experiences of learning and student outcomes. The items are consistent with *The New Zealand Curriculum*, ERO's school evaluation indicators, and the Standards for the Teaching Profession.

The online surveys are free for schools. Principals complete a survey about school practices and their own leadership. Teachers anonymously complete a survey about their own teaching practices, and their views of the school's practices and of the principal's leadership. (Teaching principals also complete the teaching practices survey.) Once surveys are completed, principals (or their nominated administrator) are able to access automated school-level reports and Kāhui Ako leaders are able to request an aggregated report for their group of schools.

The TSP supports the education system's increasing emphasis on professional inquiry and evaluative practices as key levers to improve the quality of teaching and learning, and higher and more equitable outcomes for students. Confidentiality of individual and school responses encourages honest self-report because the TSP is seen as a tool for inquiry for improvement, and not a judgement of individuals or schools.

Annual use of the tool will enable comparisons to be made over time—for schools, Kāhui Ako, and at the national level. Timing of the surveys is designed to fit school review and planning cycles.

Uptake of the TSP in its first year has been very good: overall, 403 schools used the TSP from late May to the end of October 2017. The aggregated data provide a nationally representative picture from 4,355 teachers at 335 schools, and 353 principals.

This uptake indicates an appetite for robust information to guide inquiry. It is recommended that the data are considered alongside other information on student achievement, engagement, and wellbeing. The TSP has been well received by sector groups, government education agencies, and advisers working with school leaders and Kāhui Ako.

Outline of the tool

In developing the TSP, researchers drew on international literature, recent policy (Ministry, Education Review Office (ERO), and Education Council) and advice from the advisory group, to identify the areas that were considered most important for the future of New Zealand teaching and learning. A small number of key items were then developed for each of these areas (called domains).

Teaching Practices has five domains:

1. Optimising students' opportunities to learn
2. Diversity, equity, and inclusion
3. Learning-focused partnerships
4. Teaching as inquiry
5. Being professional.

School Practices has six domains:

1. School goals
2. Supportive and caring environment
3. Coherent curriculum and evaluation
4. Learning-focused partnerships
5. Strategic resource allocation
6. Developing professional practice (covering Professional feedback and support, Professional community and Teaching as inquiry).

Items across the School Practices domains have also been grouped to allow analysis of two more sets: Collaborative school practices and School practices for Māori learners.

The Principal Leadership section has 19 items. Two groups of items were identified through factor analysis: Interpersonal relations and working with others, and Direction and fresh horizons.

The national data for all the items are presented by domain in the report. The figures in the report are expected to be a useful resource for schools and Kāhui Ako when they are enquiring into their own data.

Key findings from the 2017 national picture

Most teachers see themselves carrying out well or very well many of the 29 teaching practices included in the TSP. Most teachers and principals see the 53 school practices included in in the TSP as being 'moderately like our school' or 'very like our school'. Most teachers and principals also saw the 19 aspects of principal leadership in the TSP as being done well or very well.

The high level picture shows some differences at the domain level when it comes to the proportion of teachers saying they do something 'very well', or that the school practice is 'very like our school', as shown in Tables 1 and 2 below.

Table 1 **Teaching Practices domains—average proportion of teachers reporting practices are done 'very well'**

Domain	Mean
Being professional	43.4
Diversity, equity and inclusion	30.3
Optimising students' opportunities to learn	22.8
Teaching as Inquiry	22.3
Learning-focused partnerships	15.2

Table 2 **School Practices domains and sets —average proportion of teachers reporting practices are 'very like our school'**

Domain or set	Mean
Supportive and caring environment	48.7
Learning-focused partnerships	46.8
Professional community	42.6
School goals	41.4
Coherent curriculum and evaluation	36.6
Teaching as inquiry	35.2
Professional feedback and support	32.2
Collaborative practices	30.0
School practices for Māori learners	29.4
Strategic resource allocation	19.8

Principals' interpersonal relations and their working with others (rather than trying to do everything on their own) are highly rated, somewhat more so than their direction setting and encouraging fresh horizons. Principals tend to be more positive than teachers about their interpersonal relations, but less so on their direction setting and encouraging fresh horizons.

There is a wealth of information about the full range of teacher and principal reports of particular practices in this report that will be useful at policy, support, and practice levels.

Of note is that the decile and type of school a teacher works in made little difference to their ratings of their teaching practices. More experienced teachers and teaching principals reported higher levels of practice.

School practice ratings by teachers were also unrelated to school decile. However, there were slightly lower ratings from teachers in secondary schools, which are larger and more complex than other school types.

Main national strengths

In this section we look across all the items in each of the domains.

To identify the main aspects of national strength, we set the bar high. We list the teaching practices that stand out because around 40% or more of teachers report that they do them very well. Next we list the school practices that stand out because 50% of teachers say they are 'very like our school'. Then we list the principal practices that stand out because 50% of teachers say their principal does them very well. Each list starts with the item with the highest percentage of teachers.

Teaching practices reported as being done very well

Four of the 29 teaching practices included in the TSP were rated as being done very well by around 40% or more of teachers. These can be seen as particular strengths for New Zealand. They suggest a good sense of self-efficacy among teachers:

- take responsibility for the wellbeing of all the students you teach
- believe in your ability to improve learning outcomes for all students you teach
- make appropriate changes in response to challenge and feedback from colleagues
- promote understanding of others' perspectives and points of view.

School practices reported as being 'very like our school'

Twelve of the 53 school practices can be seen as particular strengths in New Zealand schools. The following practices were rated as being 'very like our school' by 50% or more of teachers. They indicate school cultures that emphasise relationships and support for students and their learning, that include parents and whānau, shared school values, and goals with high expectations:

- we welcome questions from parents and whānau about their child's learning in the school
- we have a positive environment in which student learning is the central focus
- we effectively include students in our classes, whatever their needs, strengths, and identities
- the school values are clearly evident in how staff interact with students

- we work in a safe and supportive environment
- school goals set high expectations for students
- things that don't work well are seen as opportunities for learning
- even in a difficult environment staff in this school can depend on each other
- we provide parents and whānau with opportunities to learn how to effectively support their child's learning at the school
- we seek and are responsive to parents' and whānau views about their child's learning
- we have an effective school plan to support student wellbeing and belonging
- we look into a range of evidence when we're trying to understand why students are struggling with their learning.

Principal leadership practices reported being done very well

Five of the 19 principal leadership practices can be seen as particular national strengths. The following were rated by 50% or more of teachers as being done very well by principals. They are consistent with the kind of culture that is evident in the school practices strengths described above:

- show commitment to continual improvement
- care for students
- model the school values
- maintain integrity in difficult situations
- look for solutions, not blame.

Main national challenges

To identify the main challenges, we list the practices that stand out because fewer than 25% of teachers identify them as ones that they do very well, or that are very like their school. None of the principal leadership items had fewer than 25% of teachers saying that their principal did them very well. The two lists start with the lowest rating item.

Teaching practices reported by few teachers as being done very well

The teaching practices that are most challenging nationally for teachers to incorporate into their work and feel confident that they are doing very well are related to the changing role of the teacher. *The New Zealand Curriculum*, published in 2007 that took effect from 2010, has emphasised teaching in ways that build learner agency, develop capabilities needed for a fast changing world, and that frame teaching as itself having a core dimension of inquiry and evaluation. These aspects are likely to need more systematic support to foster teacher confidence and capability so that they can do them very well. The following practices were rated by 25% or fewer teachers as being done very well:

- collaborate with the local community so that their expertise can be used to support learning in class or other school activities
- support the local community by ensuring that students have opportunities to actively contribute to it in ways valued by the community

- ensure students interact with information to critique and create knowledge, and transform it
- ensure students direct their own learning pace, content, and goals
- ensure students think critically and talk about what and how they are learning
- collaborate with parents and whānau so that their expertise can be used to support collective learning in class or other school activities
- draw on students' different languages, cultures, values, knowledges, and practices as resources for the learning of all
- use what the research literature says about teaching and learning to inform your choice of strategies to use with your students
- use both information about your own students and what curriculum support documents say about teaching and learning to help you select the best strategies and to prioritise what you teach
- use the knowledge that parents and whānau have about their child to support the child's learning
- engage students in specific and timely feedback and feedforward on their learning
- engage in in-depth curriculum-related discussions with individuals or groups
- analyse the impact your teaching has on each student's learning
- use student feedback on your teaching to work out what is most important to focus on and the best strategies to use.

School practices reported by few teachers as being 'very like our school'

Listed below are school practices that 25% or fewer teachers rated as being very like their school. Here we see that some of the conditions necessary for teachers to improve their practice are often not sufficiently available. It therefore makes it more difficult for inquiry to be used in schools to make worthwhile changes in teaching and learning. Co-constructing curriculum with and for Māori and seeking expertise from the local community, hapū, and iwi is also challenging for many teachers:

- teachers have sufficient time for collaborative work
- teaching time is protected from unnecessary interruptions
- time for teacher inquiry and evaluative work is protected
- teachers have sufficient time to discuss student progress and plan teaching together
- curriculum in each learning area draws on and adds to content relevant to the identities of Māori students
- we actively seek the expertise of the local community, hapū, and iwi
- we have used inquiry to make worthwhile changes in our teaching and student learning
- effective teaching resources aligned to the school are readily available
- school goals really do guide our day-to-day work.

Correlations between teaching practices, school practices, and principal leadership

Overall, there is a high correlation between principal leadership practices and school practices. Teachers who perceive their principal as leading very well are also likely to report high levels of the school practices that are associated with positive student outcomes. The relationship between school practices and teaching practices is moderate, raising some questions about the coherence in some areas between what happens at the school level, and for teachers, particularly in relation to teaching as inquiry. Teaching practice and principal leadership have a low correlation, consistent with other research on the pathway between leadership and teaching being mainly through school practices.

Variation between schools

We found considerable variability between individual schools when we looked at the proportion of teachers in a school who reported that they or their principal did things very well, or things being very like their school. This indicates that there are schools that have much to share, as well as schools that have much to learn. There were also some items where the variability was less, and the median school proportion was low. These overlap with the challenges identified above, with the addition of:

- working collaboratively
- keeping up to date with new knowledge
- having challenging goals for every student.

Kāhui Ako—working collaboratively across schools

Collaborative inquiry and sharing of effective practices across schools are key drivers for the gains expected for teaching and learning from Communities of Learning | Kāhui Ako, the most recent policy platform designed to improve teaching and learning. Most are still in an emergent stage. In the national data generated by the TSP, 70% of the teachers were in schools belonging to a Kāhui Ako. Teachers indicated that Kāhui Ako participation gave 40% of them opportunities to collaborate with other teachers, 34% indicated support for their capacity for inquiry, and 34% thought it strengthened their own teaching practice well or very well. Those in the new roles of across-school teachers gained the most, followed by those in the new within-school teaching roles. We will track the reported benefits from Kāhui Ako participation over time to contribute to the evaluation of this policy.

We found that gains from Kāhui Ako participation were related to the level of collaborative practices within teachers' own schools, suggesting that they are mutually supportive. We have created a scale of collaborative school practices to track changes over time at the national level in relation to evaluating the impact of policy changes, including the recent changes to Ministry-funded professional learning and development.

The question of time

Only 43% of teachers and 34% of principals thought their workload was sustainable and only 32% of principals thought that they could schedule enough time for the educational leadership part of their job.

Time is a key resource in teaching and learning, and school leadership. While we have become more sophisticated in what we include in *The New Zealand Curriculum*, particularly about more effective pedagogy, we appear to have added these new understandings onto existing structures, rather than, for example, changing the way we organise the school day. The new understandings of effective pedagogy appear to have been insufficiently supported through professional learning or development, or guidance.

National levels of practices

Teachers' responses to each of the three sets of items (Teaching Practices, School Practices, and Principal Leadership) form three psychometric scales. These show the national distribution of practices. We can compare national distributions on these scales over time, allowing us to evaluate whether the policy, support, and practice that occurs is improving teaching and school practices and principal leadership practices that affect student outcomes.

The 2017 picture is set out in Table 3.

Table 3   **National levels of practices 2017**

Teaching Practices						
Category (logit)	**-1 and under**	**0**	**1**	**2**	**3**	**4**	**5 and over**
Percentage of teachers	5%	16%	33%	25%	13%	5%	2%

School Practices							
Category (logit)	**-2 and under**	**-1**	**0**	**1**	**2**	**3**	**4**	**5 and over**
Percentage of teachers	1%	4%	15%	24%	24%	17%	8%	6%

Principal Leadership									
Category (logit)	**-4 and under**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**	**4**	**5 and over**
Percentage of teachers	1%	2%	3%	6%	8%	12%	15%	13%	10%	29%

This first national picture of New Zealand teaching and school practices, and principal leadership shows the strengths we have as a system, and the challenges that need collective purpose and focused and coherent work if we are to improve teaching and learning, and the outcomes for our students.

Using the national picture to support ongoing improvement

The TSP findings provide a common language for teachers, school leaders, those they work with to develop their capabilities, and the government agencies to work together and identify where different expertise and focus could be best placed to improve teaching and learning. There are some key areas of practice that we would identify as fruitful to focus on in a coherent way across the school system. Most are present in the Professional Standards, and ERO's evaluation indicators, and guidance for Kāhui Ako, and *The New Zealand Curriculum*. The TSP national picture shows that these four frameworks need more support to play the roles expected of them.

These key practice areas are:

- developing student agency in their learning, including their understanding of how to participate in and contribute to community
- developing 21st century skills such as critical thinking
- drawing on students' differences as resources for all
- supporting Māori student identities
- strengthening partnerships with parents and whānau around student learning
- teaching as inquiry
- ensuring that teachers get the time they need to undertake inquiry and collaborative work (e.g., by reworking school days and allocations).

The TSP shows that there are schools and teachers we can learn from, but that we have to think how schools and teachers can best learn from each other, and how that fits with what is being asked of them by government agencies, and the support they can call on to develop and use new understandings.

1 Introduction

The Teaching and School Practices Survey Tool (TSP) is a free set of online surveys and reports designed to give principals and schools a useful and evidence-based picture that they can use formatively to keep developing their practices. By aggregating teacher and principal survey responses we can also provide a national picture of what is happening in our schools in relation to effective practices. The Ministry of Education commissioned the development of the tool particularly to see how changes over time in that picture are related to policy that sets out to raise the capability of leadership and teaching to improve student outcomes , such as Investing in Educational Success and the changes to Ministry of Education-funded professional learning and development. This report provides that national picture for the first year that the TSP was offered to schools.

Background

The Ministry of Education commissioned NZCER to develop the TSP in late 2016, and to make it available in 2017. The NZCER team worked iteratively with a strong Advisory Group that brought sector leaders and officials from the government agencies together. The first meeting of that group in December 2016 finalised a set of principles that encompass the purpose of the TSP, and how that should be coherent with what was developed and how it was made available.

TSP principles

- The ultimate purpose of these tools is to foster effective student-centred educational leadership and teaching practices.
- The tools are coherent with *The New Zealand Curriculum*, the Education Council's professional standards, and ERO's School Evaluation Indicators.
- The tools contribute to building inquiry and evaluative capability, with the results used for individual, school, Kāhui Ako, and system improvement.
- The tools provide information related to Māori ākonga experiencing success as Māori, Pasifika student success, and inclusion of students with additional learning needs.
- The education sector is involved in the tool development.
- The tools are based on robust research and inquiry evidence about the relationship of leadership and teaching practices and student learning.
- To ensure the tools keep abreast of new evidence and needs, they will be periodically refreshed.
- The tools will be accessible.

Development of the TSP

The first TSP Advisory Group meeting discussed the NZCER team's background papers setting out the key themes in the relevant research literature and suggesting domains that it would be useful to cover. We decided that the TSP would have three sections covering Teaching Practices, School Practices, and Principal Leadership.

The second Advisory Group meeting in February discussed the draft surveys. After further refinement of the items—including an in-house trial with recent teachers—we trialled the surveys online with a good cross-section of 38 schools in March–April. The trial showed that the items mostly worked, and that the domains had psychometric coherence.

We took our learnings from that trial and a shorter set of surveys to our third Advisory Group meeting in May, and finalised the surveys after that so that they were ready for use in late May. The trial also helped us test registration and reporting processes, to make them as straightforward and easy as we could. Principals can download their school reports as soon as they judge they have sufficient responses from their schools. The school reports allow principals to compare their own responses and teachers' responses on the items in the School Practices and Principal Leadership sections. Very small schools get a slightly different report format to preserve the confidentiality of teacher responses. We also provide Kāhui Ako (Communities of Learning) with reports that aggregate teacher and principal responses across their member schools.

The TSP website has more information about the TSP, the reports, and how to read them to get the best use out of them: www.tspsurveys.org.nz

The first TSP round

The TSP will be available to schools each year in Terms 2 and 3. We chose this time frame for two reasons. Primarily, it is because these are the terms when school life is most settled, and patterns for the year are clear. That means that the picture for the school will be useful for review, and in time to feed into planning for the next year. It's also good for the national picture to have a consistent time period.

Sector leaders and the Ministry of Education used their channels to communicate the existence and usefulness of the TSP. We also communicated with Kāhui Ako leaders and those working with schools and Kāhui Ako as Expert Partners, professional development providers, and advisers. We were glad to hear that the TSP was seen as timely and useful.

Take-up of the TSP was very good for its first year, and allows us to provide a sound national report.

This report

We start with a picture of the numbers of teachers and principals who took part in the 2017 TSP, and their school characteristics, followed by the national picture of the teachers participating: their experience, their roles, whether they are permanently employed and work full-time, and in light of the growing interest in innovative learning environments, whether they team-teach, and their morale and views of the sufficiency and fairness of their workload. Then we give the national picture of the principals participating: their experience, whether they are also teaching, and views of their workload and support.

Section 2 provides the national picture of teacher and teaching principal responses to the items in the Teaching Practices survey, reporting each domain first by teacher numbers, and then showing variance across schools. We also report whether teacher responses are related to the type of school they work in, and its decile, and their own years of experience, and whether they team-teach.

Section 3 provides the national picture of teacher and principal responses to the items in the School Practices survey, again reporting each domain first by teacher and principal numbers, and then showing variance across schools in terms of teachers' responses. Then we check if teacher and principal responses are related to the type of school they work in and its decile, and for teachers, whether they team-teach.

The establishment of Kāhui Ako and an emphasis on working more collaboratively is reflected in the focus of Section 4, which provides a scale of relevant items across different domains from the School Practices survey. Here we also report teacher and principal responses to a set of questions asking them about gains from their Kāhui Ako experience, if their school belonged to one.

We also constructed a scale of practices to support Māori learners, using relevant items across different School Practices domains, and that is described in Section 5.

Principal leadership is the focus of the next section, describing the two factors into which the items in this survey are grouped, and seeing whether teacher and principal views are related to school characteristics, and principal views of their workload.

Section 7 provides the results of psychometric scaling of each of the three survey responses so that we have one scale for Teaching Practices, one for School Practices, and one for Principal Leadership. We look at how these are related to school type, decile, and morale and workload, and the variance between schools. We then see how correlated the scales are: how closely a teacher's report of their teaching practices matches their report of school practices, and how closely their view of their principal's leadership matches their report of school practices, and their own teaching practices.

Then we show how teachers' responses are distributed across the scales, and provide some scale descriptions that can provide a national picture of our system's strengths and areas to

work on. We provide a draft report format for 2018 that can incorporate these levels and show a school how they compare with the national picture.

We end with a high-level discussion of this national picture of teaching practices, school practices, and principal leadership.

2. TSP participation 2017

In 2017, 4,355 teachers from 335 schools and 353 principals took part in the TSP by the time we used the responses for this national report.[1] Teacher responses came from 150 full primary schools, 120 contributing schools, 14 intermediate schools, 39 secondary schools, seven area schools, and five special schools.

We had responses from 165 full primary school principals, 122 contributing school principals, 13 intermediate principals, 41 secondary school principals, eight area school principals, and four special school principals. We had both principal and teacher responses from 293 schools.

Table 4 shows the school characteristics of respondents, and compares them with schools nationally. This shows that the schools taking part in the TSP in 2017 provide a generally representative picture of New Zealand schools, with some over-representation of schools in main urban areas, and integrated schools; and some under-representation of schools in minor urban areas, contributing schools, composite/area schools, and high Māori enrolment schools. Because we encouraged Kāhui Ako to take part, offering an aggregated report for the Kāhui Ako as a whole, we have some over-representation of schools belonging to a Kāhui Ako.

We are confident that the sample is sufficiently representative not to warrant the weighting of data.

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[1] The data we used come from a total of 395 schools. The TSP was used by 403 schools in total in 2017.

Table 4   **School characteristics of TSP participants 2017[2]**

	Teachers n = 4,355 %	Teachers' schools[3] n = 335 %	Principals' schools n = 353 %	National school characteristics n = 2,532 %
Type				
Full primary	26	45	47	42
Contributing	31	36	35	30
Intermediate	6	4	4	5
Composite/area schools	3	2	2	7
Secondary	32	12	12	14
Other schools	2	1	1	3
Decile				
1	7	9	9	11
2	6	8	9	10
3	7	9	10	10
4	9	10	9	9
5	11	11	10	10
6	10	11	10	9
7	9	10	12	9
8	13	10	11	10
9	12	12	11	10
10	14	10	9	10
Not applicable	<1	<1	<1	2
Authority				
State: Integrated	7	10	10	13
State: Not integrated	93	90	90	83
Private/Other	<1	<1	<1	4

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[2]   All percentages reported in the tables in this report have been rounded up if .5 or more, and down if .4 or less.

[3]   Our unit of response is primarily the school, since teachers take part in TSP as part of their school. We have also compared national teacher numbers with the data available on Education Counts, for school type, location, and decile. Teacher numbers are closer to the teacher responses in relation to school type than they are to the teachers' schools in this table. Nationally, full primary teachers comprise 21%, contributing primary 26%, intermediate 6%, composite 6%, secondary 40%, and other schools 2%. In terms of location, there are 74% of teachers working in schools located in main urban areas, 7% in secondary urban areas, 11% in minor urban areas, and 8% in rural areas. We found similar proportions in relation to decile (most were the same or 1–2 percentage points different).

Urban/Rural				
Main urban area	65	52	48	55
Secondary urban area	6	6	7	6
Minor urban area	19	16	16	12
Rural area	9	26	29	27
School gender				
Co-educational school	95	98	98	95
Boys' school	1	1	1	2
Girls' school	4	1	1	3
Size				
Small (up to 100)	6	24	28	28
Small–medium (101–250)	18	30	31	28
Medium (251–500)	34	30	26	26
Medium–large (501–1,000)	24	12	10	13
Large (over 1,000)	19	5	5	5
Proportion of Māori students				
Up to 7%	18	16	14	14
8–14%	23	19	20	21
15–30%	32	34	34	29
Over 30%	26	31	32	35
Proportion of Pasifika students				
Up to 7%	76	75	76	75
8–14%	10	10	9	10
15–30%	7	7	7	7
Over 30%	6	8	8	7
Ministry of Education region				
Tai Tokerau	5	6	6	6
Auckland	30	22	20	22
Waikato	16	19	18	11
Bay of Plenty/Rotorua/Taupo	2	2	2	7
Hawkes Bay/Gisborne	3	3	3	7
Taranaki/Whanganui/Manawatu	5	6	8	9
Wellington	12	11	12	11
Nelson/Marlborough/West Coast	4	6	5	5
Canterbury	16	16	17	11
Otago/Southland	7	9	10	9
Kāhui Ako membership				
School belongs to a Kāhui Ako	80	79	78	64

Teacher characteristics

Teachers responding range from those in their early years, to the 44% who have been teaching for 16+ years. Table 5 shows that around half have been 5 years or less in their current school, and half have worked with their current principal for less than 3 years.

Table 5 **Teaching experience overall, in the school, and with current principal (*n* = 4,355)[4]**

Years	Years as teacher %	Years at current school %	Years at current school with current principal %
Under 3 years	10	30	51
3–5 years	12	22	21
6–10 years	16	22	15
11–15 years	17	13	5
16+ years	44	12	1

Most teachers worked full-time (87%), and most had permanent positions (80%). Eighteen percent had fixed-term positions (but fixed-term positions were much higher among teachers in their first 3 years: 55%) and less than 1% were relieving.

Forty-three percent of teachers are now team-teaching: 14% all of the time, and 29% some of the time. Team-teaching all of the time was most frequent among new entrant teachers (25%), followed by Years 1–6 teachers (22%), Years 7–8 (15%), with few Years 9–13 teachers doing so (3%). But Years 9–13 teachers had somewhat higher levels of team-teaching some of the time than new entrant to Year 8 teachers.

Only 4% of the teachers responding had no direct teaching responsibility. Table 6 shows their school roles, with around half having a school role as well as their direct teaching role.

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[4] Table numbers do not add up to 100%, due to some non-responses (e.g., 8% of teachers did not say how many years they had been at their school with the current principal).

Table 6   **Teachers' roles in their school**

Role	Teachers *n* = 4,355 %
Class/subject teacher	82
Management unit holder	32
Syndicate/Curriculum leader/Faculty leader/Head of department	24
Assistant/Deputy principal	10
Specialist teacher	9
Dean	4
Kāhui Ako within-school teacher	4
Kāhui Ako across-school teacher	1
Careers advisor/transition teacher	1
Guidance counsellor	1
Kāhui Ako leader	<1

Participants gave good coverage of all student year levels. Table 7 also shows that many teachers teach more than one year level (the percentages add up to 276%).

Table 7   **Student year levels taught**

Year level	Teachers *n* = 4,355 %
New entrants	12
Year 1	17
Year 2	18
Year 3	18
Year 4	18
Year 5	19
Year 6	18
Year 7	16
Year 8	15
Year 9	24
Year 10	26
Year 11	26
Year 12	26
Year 13	23

Teacher workload and morale

It is important to have some idea of workload and morale to provide a context for teaching and school practices, and principal leadership. Figure 1 shows that 61% of teachers report good morale levels. Fewer think their workload is sustainable (43%) or fair (48%).

Figure 1 **Teacher morale and workload**
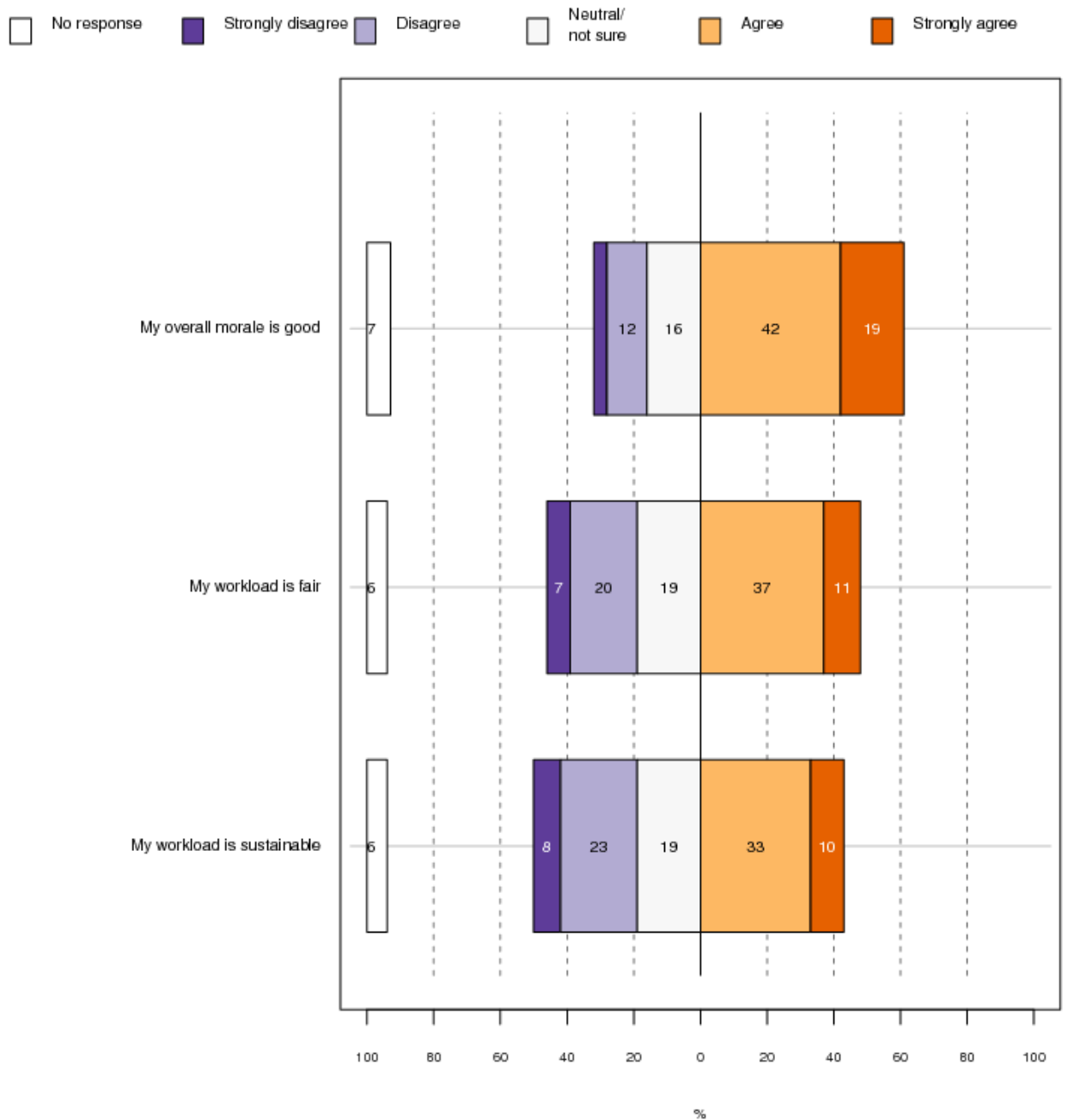
There are strong links between workload views: 94% of those who strongly agree they have a sustainable workload also strongly agree their workload is fair—and at the other end of the spectrum, 63% of those who strongly disagree that they have a sustainable workload strongly disagree that their workload is fair (all but a few of the rest disagree that they have a fair workload).

Morale is also related to workload views: 73% of those who strongly agree they have a fair workload also strongly agree that their overall morale is good, compared with none of those who strongly disagree that they have a fair workload.

Fewer full-time teachers found their workload sustainable (42%, compared with 56% of part-time teachers). Class/subject teachers and the 'middle' leaders: syndicate/curriculum leaders, faculty leaders or heads of department and management unit holders were somewhat less likely than those with senior roles or specialist teachers to find their workload sustainable.

Teacher morale and views about their workload were not associated with their years of experience, or whether they team-taught or not.

Principal characteristics

Table 8 shows how long principals taking part in TSP had been in the role, and how long they had been in their current school.[5]

Table 8   **Principal experience (*n* = 353)**

Years	Years as principal %	Years as principal at current school %
Under 3 years	27	37
3–5 years	15	18
6–10 years	18	19
11–15 years	12	12
16+ years	23	9

Just over half the principals (57%) had led only their current school. Twenty-four percent of principals had experience of leading two schools, 7% of leading three schools, and another 7% had led four or more schools.

A quarter of the principals were teaching as well. These principals also answered the Teaching Practices section of the survey, and their answers to that section are included in the national picture of teaching practices.

Principal support and workload

To provide some context, we asked principals a few questions about their workload and support. This shows, as other recent surveys have, some challenges for principals and the system as a

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[5]   Around 6% of the principals did not answer these questions, so the percentages reported do not add up to 100%.

whole in relation to the widespread interest in ongoing development of school practices and leadership.[6]

Figure 2 shows that almost all principals felt their school was supported by its local community, some more than others. Just under half thought the regional Ministry of Education office supported them to do their job effectively. Thirty-eight percent had no difficulty recruiting effective teachers for the school. Thirty-five percent thought their workload was sustainable, and 32% that they could schedule enough time for the educational leadership part of their job. These views were similar for primary and secondary principals. They did not differ in relation to school decile, apart from more principals of decile 7–10 schools than principals of decile 1–6 schools strongly agreeing that the local community strongly supported the school.

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[6]   A fuller recent national picture of primary and intermediate principals' role and its support can be found in Wylie, C. (2017). *Principals and their work*. Wellington: NZCER. Available at www.nzcer.org.nz/research/national-survey

Figure 2 **Principal support and workload (*n* = 353)**
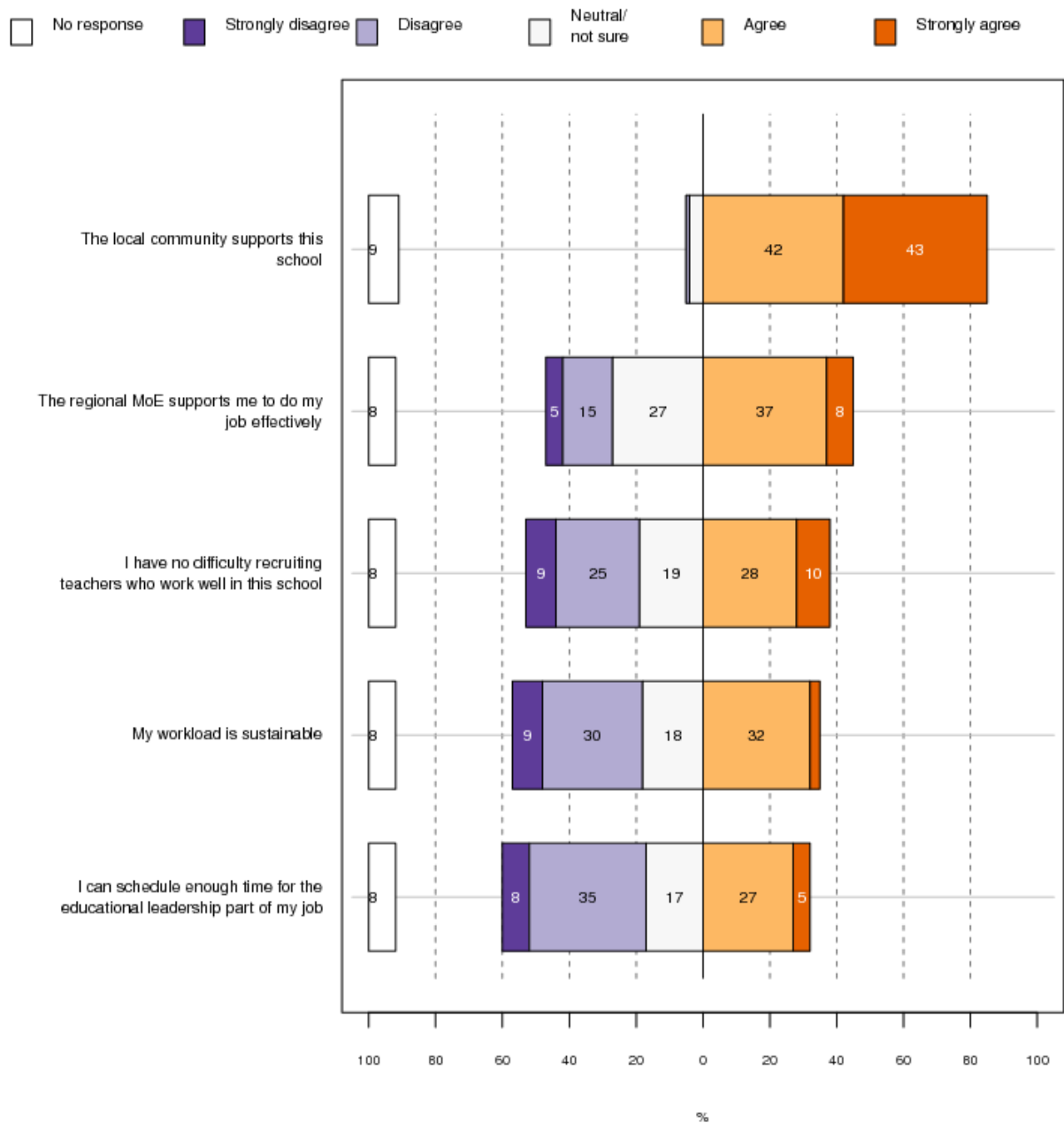
Principals' views of how sustainable their workload was, whether they could schedule enough time for educational leadership, and whether they had difficulty recruiting teachers were not related to their years in the principal role, years at their current school, number of schools they had led, or if they were also a teaching principal.

Support from the local community or regional Ministry of Education, and lack of difficulty recruiting teachers were also not associated with principal views of the sustainability of their workload.

Kāhui Ako leaders (*n* = 29) found it somewhat easier than principals of other schools in a Kāhui Ako to schedule enough time for educational leadership: 41%, compared with 30%.

3.   Teaching practices /   He mahinga kaiako

Introduction

This chapter focuses on the Teaching Practices section. The questions in this section of the TSP are based on the recent research literature on effective teaching practices in the areas considered most important in the current New Zealand context, and are organised according to five domains:

- Optimising students' opportunities to learn
- Diversity, equity, and inclusion
- Learning-focused partnerships
- Teaching as inquiry
- Being professional.

What follows is a brief introduction to each of these domains followed by our analysis of survey responses from 4,443 teachers (including 4,355 teacher and 88 teaching principal responses).

In most cases we present the responses of teachers and teaching principals together and refer to this group as 'teachers'. Although more teaching principals than teachers tended to report carrying out each of the practices well or very well, the *pattern* of responses is much the same overall; that is, the practices that teachers reported carrying out well or very well were similar to those that teaching principals reported carrying out well or very well. We note the few instances where there are differences in the pattern of responses.

As well as providing a 'teacher' picture, we also present a national 'school' picture. This picture is based on 311 schools where at least half of the teachers appeared to have responded to the TSP and the teachers had answered the Teaching Practices section of the TSP.[7]

We also look at teacher responses according to school type and decile, and according to two teacher-level factors: years of experience and involvement in team teaching.

Optimising students' opportunities to learn / Te whakamana i te ako o ngā ākonga

This domain is about the opportunities for learning teachers provide their students. The questions asked in this domain are informed by recent research literature on: the features of highly effective instructional practices (see, for example, Alton-Lee, 2003; Hattie, 2009; Reyes, 2015); indicators of teaching effectiveness (for example, Coe, Aloisi, Higgins, & Major, 2014), and

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[7]   This means that 84 schools from a possible 395 were excluded.

'adaptive expertise' (Timperley, 2013). The questions also draw on the literature addressing future-oriented perspectives on teaching and learning (see, for example, Bolstad, Gilbert with McDowall, Bull, Boyd & Hipkins, 2012; Bull & Gilbert, 2012), such as the need to: personalise learning so that each student can reach their full potential; and to rethink teacher and learner roles with teachers as 'learning coaches'—skilled, advanced learners who support students to reach their learning goals and "actively interact with knowledge" (Bull & Gilbert, 2012, pp. 5–6)

Teacher picture

When compared with other domains, teachers rated their practices for *Optimising students' opportunities to learn* highly. Figure 3 shows that most teachers reported engaging in each of the practices in this domain either well or very well.

The opportunities for learning that teachers were more likely to rate themselves as providing well or very well were: using flexible groupings to meet the changing needs of individual students (78%); engaging students in specific and timely feedback and feedforward on their learning (78%); and providing authentic learning experiences in which students apply their learning in a range of meaningful contexts (77%).

The opportunities that teachers were less likely to rate themselves as providing well or very well are those relating to student meta-cognition, meta-knowledge, and agency; that is, interacting with information to critique and create knowledge, and transform it (62%); and ensuring students direct their own learning pace, content, and goals (62%). These areas are inter-related as, to be agentic, students need meta-knowledge and meta-cognition.

More teaching principals report carrying out each of the practices in this domain very well or well but, overall, the pattern of responses is similar across the two groups.

Figure 3 **Optimising students' opportunities to learn**
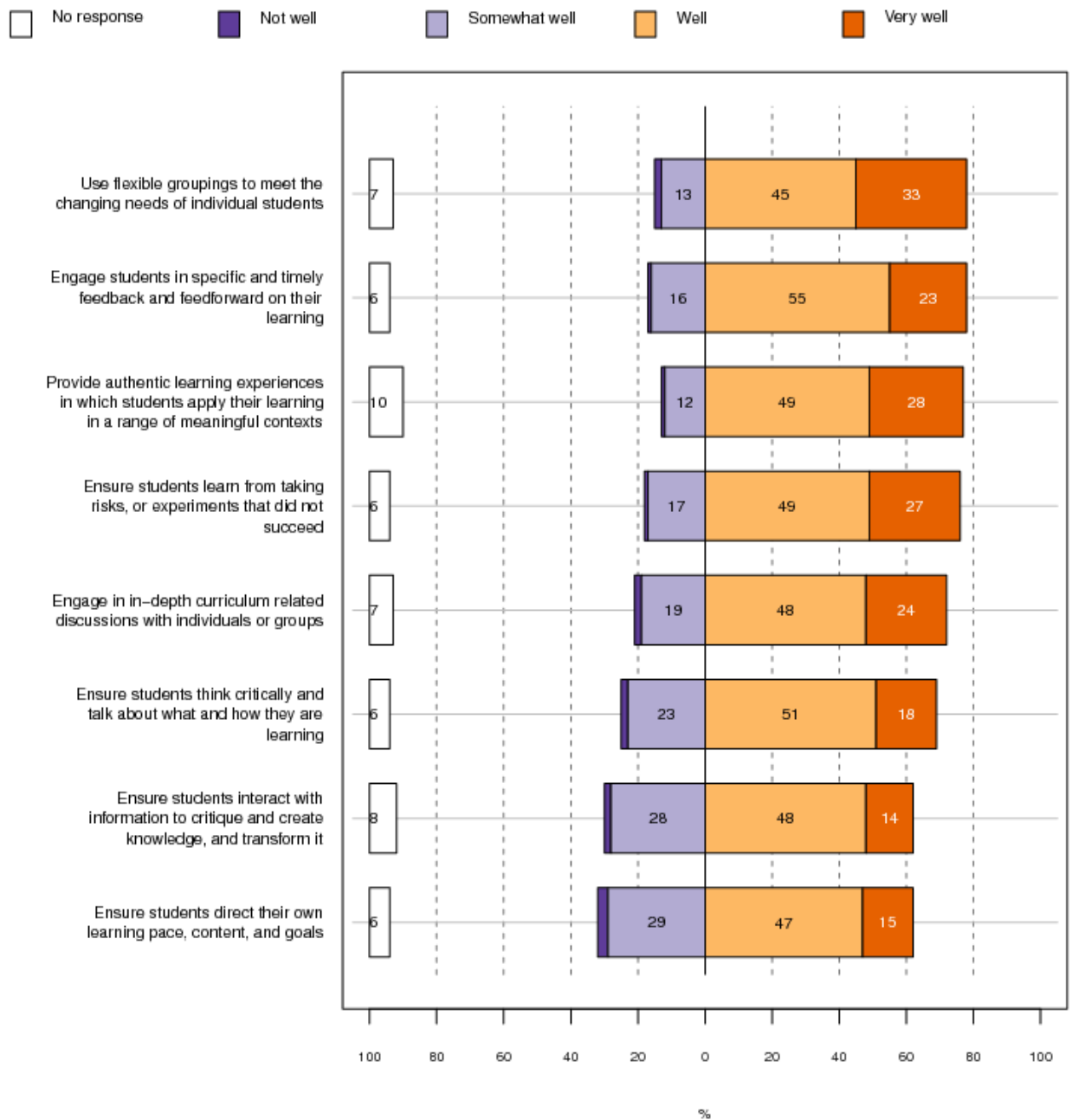
School picture

Figure 4 shows the differences between schools in the percentages of teachers in each school who reported carrying out each practice in the domain *Optimising students' opportunities to learn* very well. There is most school variability in responses to use flexible groupings to meet the changing needs of individual students, which might be explained by different school contexts, particularly the differences between primary and secondary schools' practices in relation to grouping students, with primary schools traditionally being more likely to do this. There is least school variability in responses to: ensure students interact with information to

critique and create knowledge, and to transform it and ensure students direct their own learning pace, content, and goals.

Figure 4 **Optimising students' opportunities to learn—differences between schools**

Proportion of teachers in school saying very well (%)
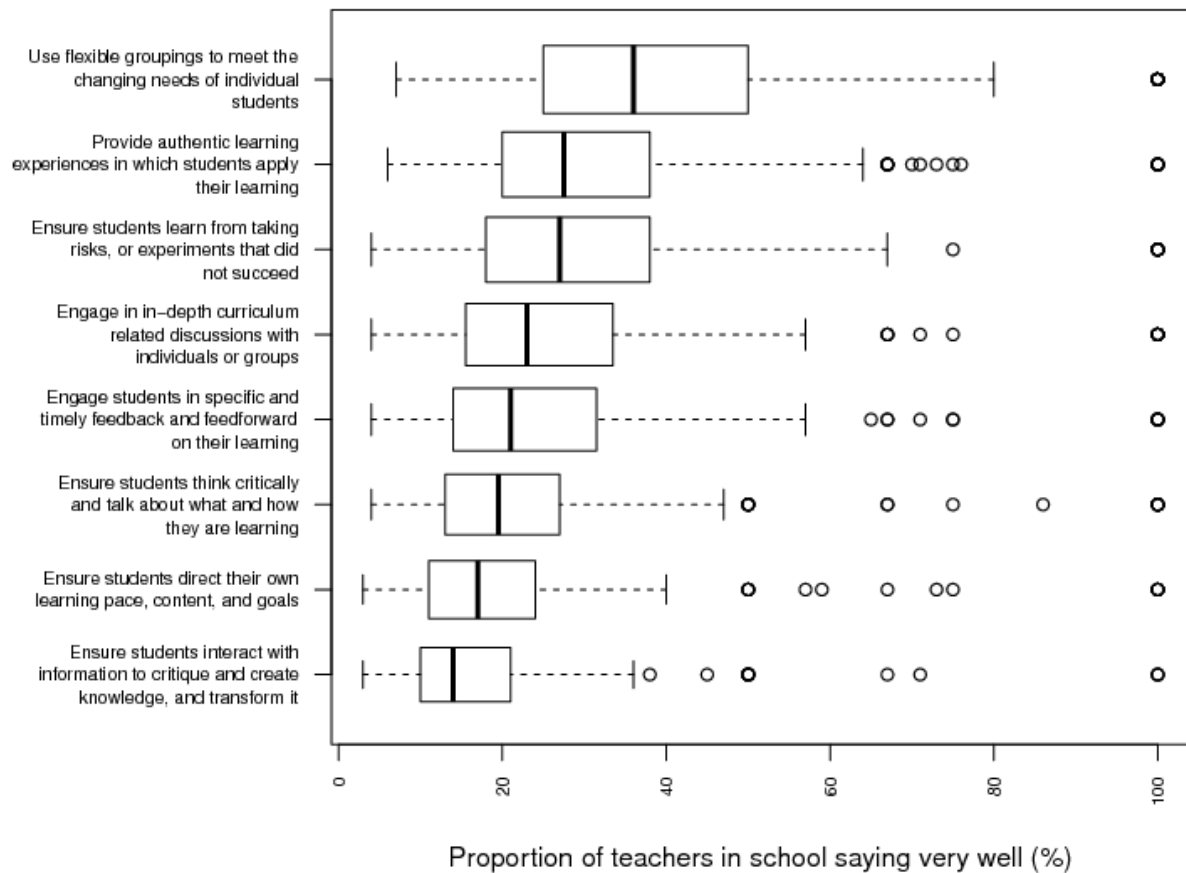
Diversity, equity, and inclusion / He mana kanorau, he tōkeke, he whakawhāiti

This domain is about how we respond to the different strengths and needs of all students in our classrooms. In the Best Evidence Synthesis (BES) *Quality teaching for diverse students in schooling*, Alton-Lee (2003) argues that the central professional challenge for teachers is to manage simultaneously the needs of diverse students. Alton-Lee (2003) argues that:

> Diversity encompasses many characteristics including ethnicity, socio-economic background, home language, gender, special needs, disability, and giftedness. Teaching needs to be responsive to diversity within ethnic groups… [and] to recognise the diversity within individual students influenced by intersections of gender, cultural heritage(s), socio-economic background, and talent. (p. v)

This BES provides a useful frame for thinking about questions that relate to diversity, equity, and inclusion for the Teaching Practices section in that it rejects the notion of a 'normal' group and 'other' or minority groups of children. Diversity and difference is seen as central to the focus on quality teaching and is fundamental in that it honours Articles 2 and 3 of the Treaty of Waitangi.

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Gilbert (2005) extends these ideas by arguing that we need to abandon the 'one-size-fits-all' approach which provides students with the choice of being assimilated into the norm or failing in the education system, to a more personalised approach in which students can express themselves in different ways and still achieve success. The idea of Māori achieving success as Māori is consistent with such an approach.

In the report *Supporting future-oriented learning & teaching—a New Zealand perspective*, Bolstad et al. (2012) build on these ideas of diversity, equity, and inclusion, arguing for the need to recognise diversity as a strength of any system, and so something that needs to be actively fostered and taught *for*. Students need the ability to work with a diversity of people (because the changing global environment requires us to engage with people from many different backgrounds and world views) and to work with a diversity of ideas in order to solve increasingly complex, real-world challenges.

In two recent reports, ERO (2015, 2016) draws attention to the associations found between teacher commitment to equity, diversity, and inclusion and positive shifts in student learning outcomes. For example, one of the four conditions that ERO (2015, p.5) identifies as distinguishing successful from less successful and unsuccessful schools in working to improve the achievement of targeted students is "Their explicit moral commitment to equity and excellence"

.

Teacher picture

Most teachers reported engaging in each of the practices in the domain *Diversity, equity, and inclusion* either well or very well, as shown in Figure 5.

The practice that teachers most frequently reported carrying out well or very well was promoting understanding of others' perspectives and points of view (85%). Teachers were less likely to report acknowledging their own languages, cultures, and identities and how these influenced their practices (73%); and drawing on students' different languages, cultures, values, knowledge, and practices as resources for the learning of all well or very well (66%).

More teaching principals than teachers reported carrying out each of the practices in this domain well or very well than teachers, but the pattern of responses is similar across the two groups.

Figure 5 **Diversity, equity, and inclusion**

Legend: No response | Not well | Somewhat well | Well | Very well

Promote understanding of others' perspectives and points of view: 6, 8, 46, 39

Ensure all students can achieve success while maintaining their own sense of identities and differences: 6, 13, 49, 31

Provide opportunities for students to put inclusion and equity into practice: 7, 13, 48, 31

Provide students with opportunities to use different approaches to demonstrate their learning: 6, 13, 46, 33

Acknowledge your own language(s) culture(s) and identities and how they influence your practice: 9, 16, 45, 28

Draw on students' different languages, cultures, values, knowledges, and practices as resources for the learning of all: 6, 25, 46, 20

School picture

Figure 6 shows the differences between individual schools, looking at the percentages of teachers in each school who reported carrying out each practice in the domain *Diversity, equity, and inclusion* very well. There is most school variability in responses to promote understanding of others' perspectives and points of view and provide opportunities for students to put inclusion and equity into practice, and least variability in school responses to draw on students' different languages, cultures, values, knowledges, and practices as resources for the learning of all.

Figure 6 **Diversity, equity, and inclusion—differences between schools**

Proportion of teachers in school saying very well (%)
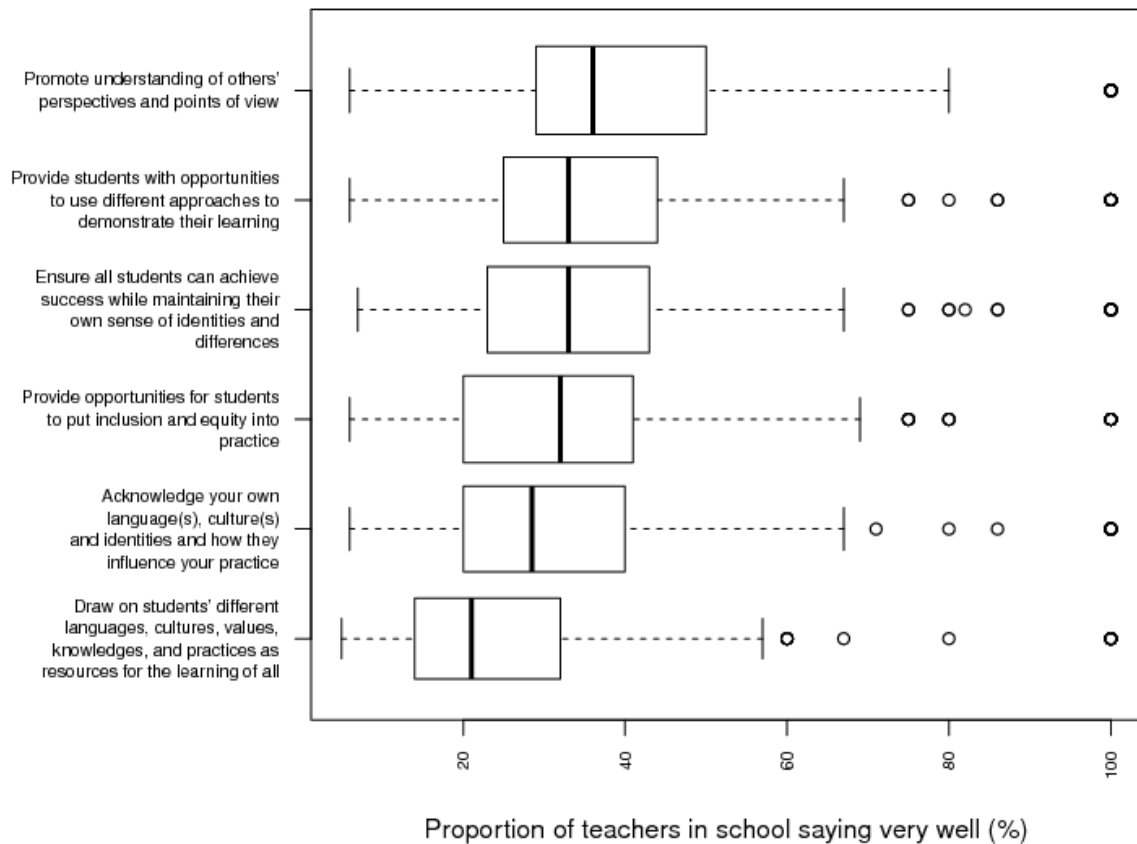
Learning-focused partnerships / He mahi tahi, he ako te hua

This domain is about collaboration with parents, whānau, and members of the local community to support learning. Findings in three recent ERO reports highlight the importance for student learning of teacher and parent, whānau, and community relationships. For example, ERO (2013, p.9) found that teachers categorised as 'highly effective' in accelerating the progress of priority learners "developed partnerships with parents and whānau to support students' learning". ERO (2014) found that "the capability to develop relationships with students, parents, whānau, trustees, school leaders, and other teaching professionals to support acceleration of progress" (ERO, 2014, p. 13) to be one of the top five capabilities that made a difference in schools' effectiveness to respond to underachievement. And ERO (2016, p.26) identifies "educationally powerful connections and relationships" (to be one of the six key process indicator domains found to influence school effectiveness and student outcomes.

Bolstad et al. (2012) highlight the importance of such relationships, not only to support parents and whānau to help their children with school learning at home, but also so that members of the public can understand and help to shape future-oriented approaches to education in the light of societal and economic changes. Bolstad et al. (2012) go on to argue that we now need *new* kinds

of partnerships and relationships because 21st century learners need access to a wider range of resources and expertise than in the past. It is unlikely, they argue, that the wide range of expertise needed by 21st century learners could be held amongst the staff of a single school. Teachers will therefore need to collaborate with other people and groups who can provide access to specific kinds of expertise, knowledge, or learning opportunities.

Teacher picture

Overall, teachers tended to rate their practices in the domain of building *Learning-focused partnerships* lower than practices in the other four domains, especially in relation to partnerships with the local community. Approximately two-thirds (66%) of teachers reported using the knowledge that parents/whānau have about their child to support their child's learning, and just over one half (56%) reported collaborating with parents/whānau so that their expertise can be used to support collective learning in class or other activities well or very well. Less than half reported supporting the local community by ensuring students have opportunities to actively contribute to it in ways valued by the community (41%) and collaborating with the local community so that their expertise can be used to support learning in class and other activities well or very well (40%). Figure 7 has the details.

There were relatively large differences between the responses of teachers in relation to engaging with the knowledge and expertise of parents/whānau to support learning. For example, 65% of teachers, compared with 82% of teaching principals, reported using the knowledge of parents/whānau either well or very well, and 56% of teachers, compared with 81% of teaching principals, reported collaborating with parents/whānau either well or very well. The same differences were evident in relation to engaging with the knowledge and expertise of the community, with 40% of teachers, compared with 80% of teaching principals, reporting supporting the local community either well or very well and 38% of teachers, compared with 77% of teaching principals, reporting collaborating with the local community to support learning either well or very well.

A possible explanation for this difference is that due to their school leadership responsibilities teaching principals are likely to have many more opportunities to build learning-focused partnerships with parents/whānau and the local community than teachers. They are also more likely to see this as an important part of their role.

Figure 7 **Learning-focused partnerships**
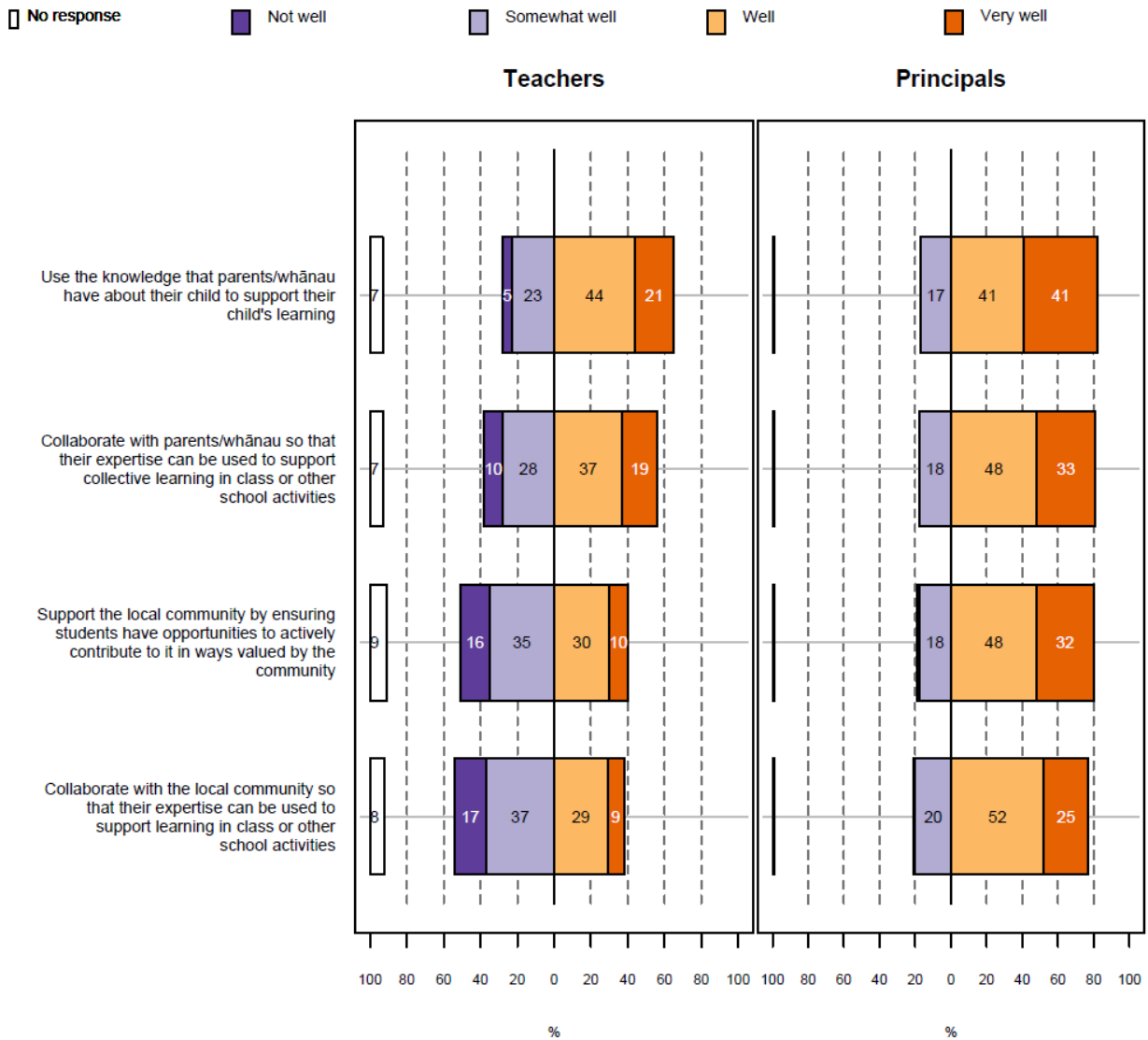
School picture

The variability between individual schools is shown in Figure 8, focusing on the percentages of teachers in each school who reported carrying out each practice in the domain *Learning-focused partnerships* very well. Interestingly, there is less school variability here than in the previous two domains. There is most school variability in school responses to use the knowledge that parents/whānau have about their child to support their child's learning, which might be explained by differing school contexts in relation to this practice. There is least variability in school responses to collaborate with the local community so that their expertise can be used to support learning in class or other school activities.

Figure 8 **Learning-focused partnerships—differences between schools**
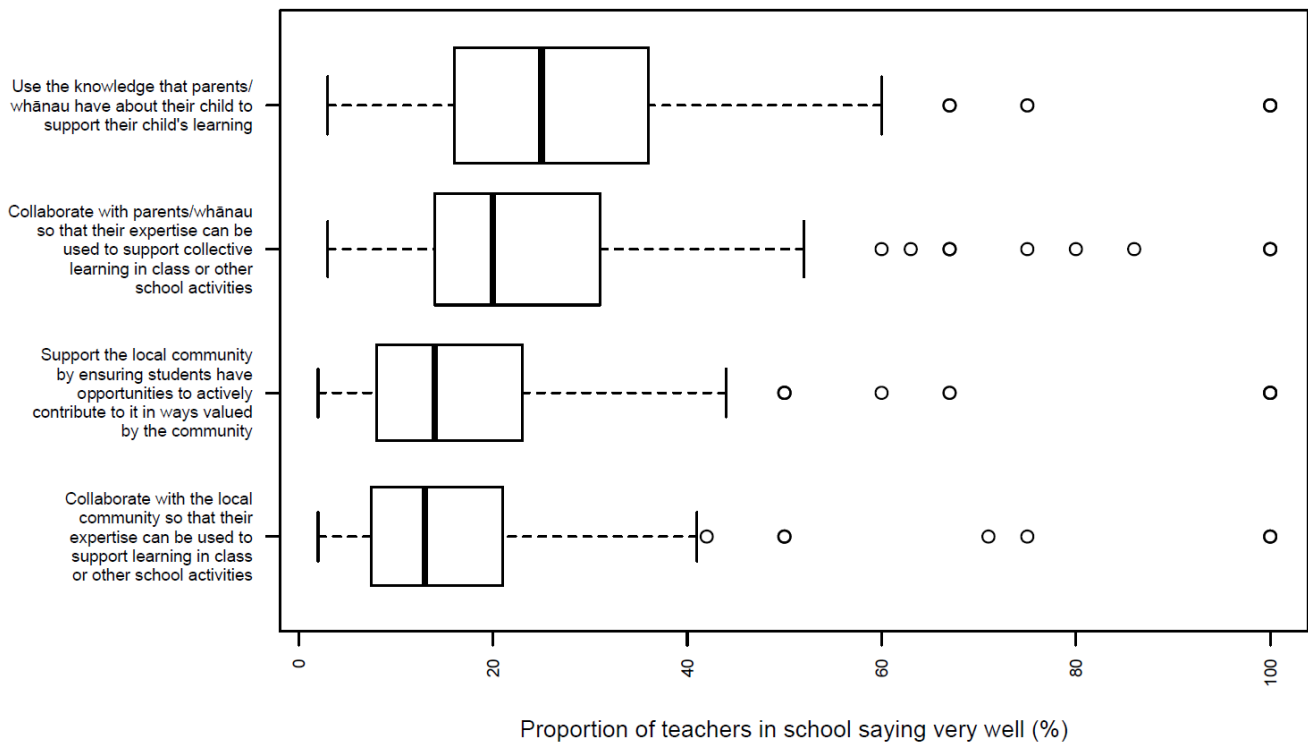
Teaching as inquiry   He whakaako pakirehua

This domain is about inquiring into teaching and learning to improve teaching practices and student outcomes. The research literature tells us that collaborative inquiry is one of the most effective ways of enabling teachers to make changes to their practice in ways that can impact on student learning (Clavel, Mendez, & Crespo, 2016; James & McCormick, 2009; Katz & Earl, 2010). The literature also highlights the dispositions teachers need to effectively carry out collaborative inquiry and innovation such as the capacity to be curious, creative, adaptive, and disciplined (see, for example, Aitken, Sinnema, & Meyer, 2013; Earl & Timperley, 2015; Timperley, 2013; Timperley, Kaser, & Halbert, 2014). There are many sets of guidelines and frameworks describing the steps needed for effective collaborative inquiry (see, for example, Donohoo & Velasco, 2016; Ontario Ministry of Education, 2014; Timperley et al., 2014.)

Teacher picture

Many teachers (between 67% and 70%) reported carrying out all of the practices in the domain *Teaching as inquiry* either well or very well. More teaching principals than teachers reported carrying out each of the practices in this domain well or very well but the pattern of responses is similar across the two groups.

Figure 9   **Teaching as inquiry**
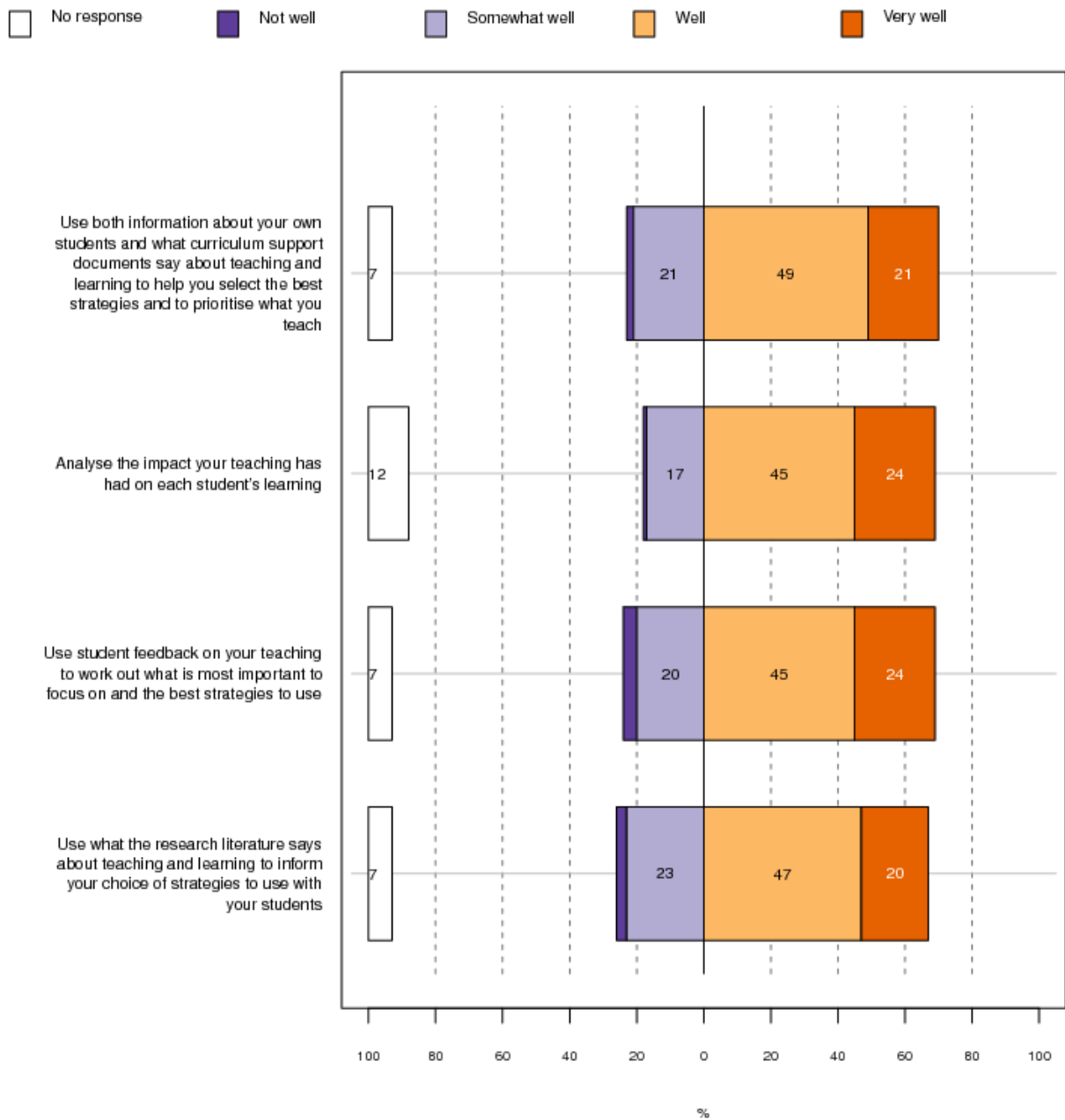
School picture

Figure 10 shows that, for the *Teaching as inquiry* domain, the difference between schools in terms of the proportion of teachers who report doing each practice very well is also not as wide-ranging as the first two domains in the Teacher Practices survey. The item with the least difference between schools is use what the research literature says about teaching and learning to inform your choice of strategies to use with your students.

Figure 10 **Teaching as inquiry—differences between schools**

Proportion of teachers in school saying very well (%)
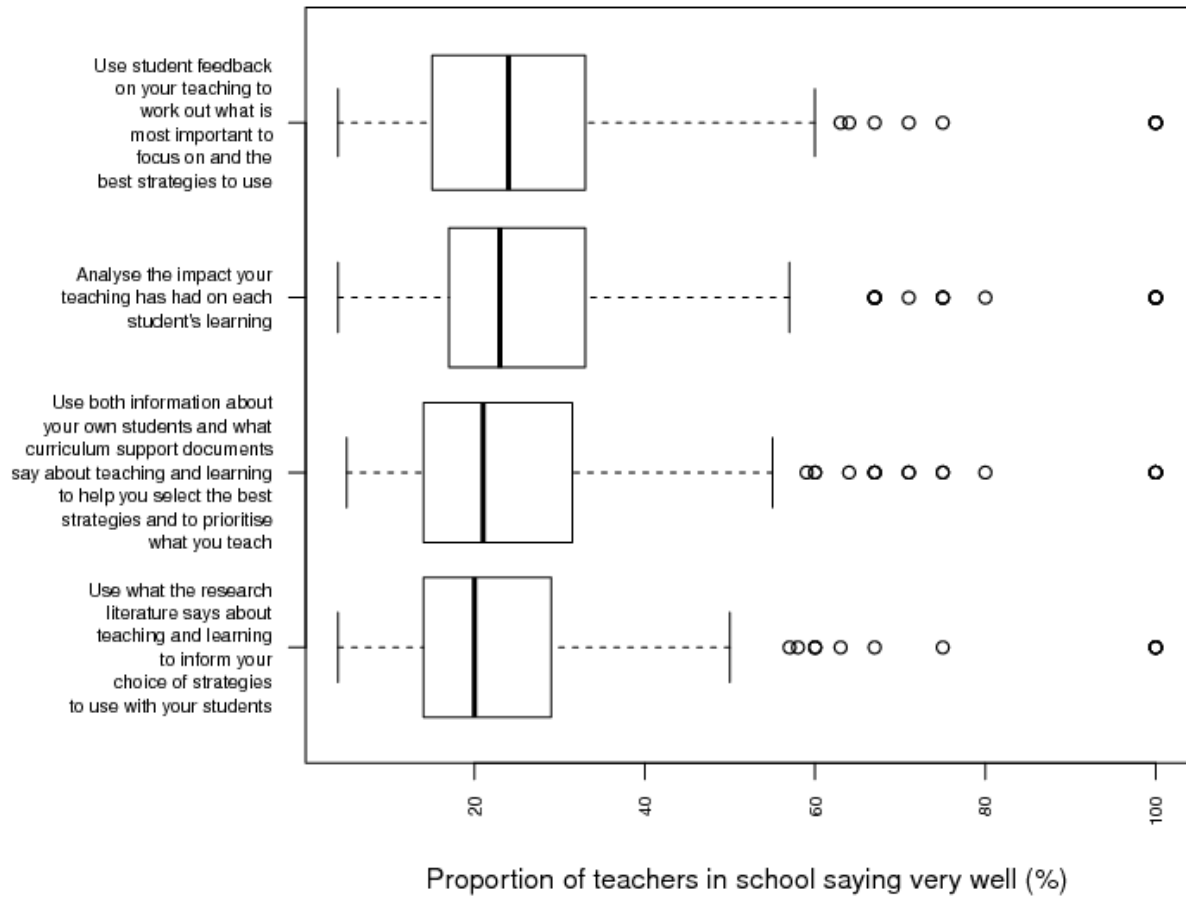
Being professional / He ngaiotanga

This domain is about what it means to be a professional and to be part of the teaching profession. This domain seeks to capture the complexity of teacher decision making based on teachers' growing and changing bodies of knowledge, ways of being, and the reciprocal relationships they have with their students and others. The literature suggests that developing 'habits of mind' or 'ways of being and knowing' are continuous learning experiences that define the complexity and uncertainty of teaching. For example, Sinnema, Meyer, and Aitken (2017, p.10) argue that teachers need to be

> meta-cognitive and self-regulated learners—able and inclined to 'think about their thinking' in relation to the other inquiries and to actively initiate, motivate, and direct their own efforts to acquire knowledge and skills rather than rely on others for instruction (Schunk & Zimmerman, 1994).

Hattie (2009) and researchers such as Bolstad et al. (2012) and Bull and Gilbert (2012) also contend that teachers need to re-conceptualise their teaching roles if their students are going to

become effective 21st century learners. Existing ideas of teachers teaching and students learning need to be challenged so we capitalise on what we know about learning and how best to optimise it.

Two of the ERO (2016) process indicators organised in terms of six key domains found to influence school effectiveness and student outcomes are 'adaptive expertise' and 'professional capability and collective capacity'. Schleicher (2015) argues for the importance of teachers' self-efficacy in teachers' work. There is evidence that teachers' sense of self-efficacy—their belief in their ability to teach, engage students and manage a classroom—has an impact on student achievement and motivation, as well as on teachers' own practices, enthusiasm, commitment, job satisfaction, and behaviour in the classroom (Caprara, Barbaranelli, Steca, & Malone, 2006; Skaalvik & Skaalvik, 2014, Tschannen-Moran & Barr, 2004; Tschannen-Moran & Hoy, 2001).

Teacher picture

Being professional is the domain in which teachers rated their practices most highly. At least three-quarters of teachers reported carrying out each of the practices in this domain either well or very well, as shown in Figure 11. The three practices that they were most likely to report carrying out well or very well were: taking responsibility for the wellbeing of all the children they teach (91%); believing in their ability to improve learning outcomes for all students they teach (89%); and making appropriate changes in response to challenge and feedback from colleagues (88%). The practice that they were least likely to report carrying out well or very well was keeping up to date with relevant knowledge about teaching and learning (75%). As with the other domains, while more teaching principals than teachers reported carrying out each of the practices in this domain well or very well, the pattern of responses is similar across the two groups.

Figure 11 **Being professional**
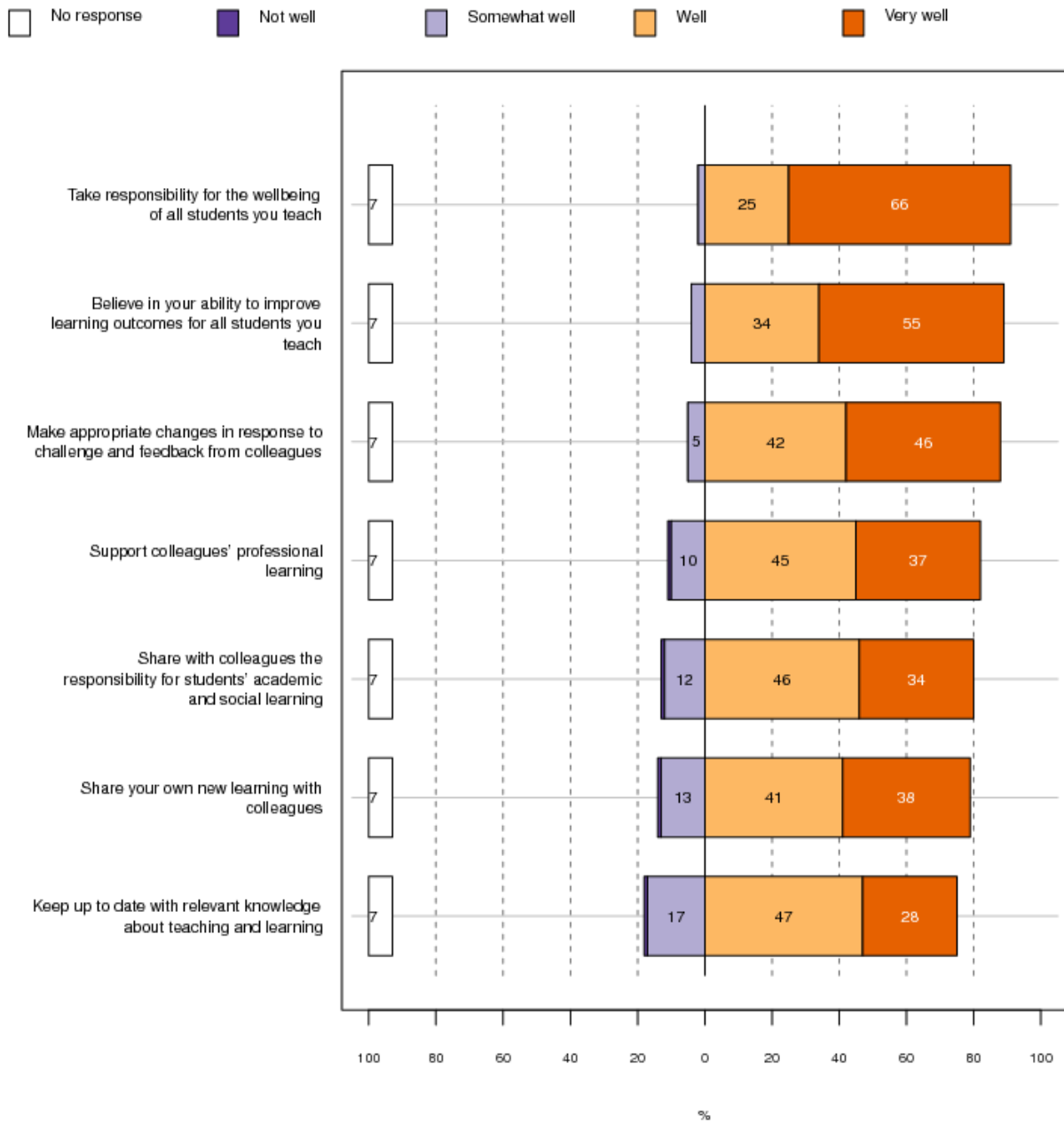
School picture

Differences in the percentages of teachers in individual schools who reported carrying out each practice in the domain *Being professional* very well are given in Figure 12. This shows a wide range between schools, with some having all of their teachers saying they did things very well, and some where very few of the teachers said they did things very well.

There is most variability between schools for the items make appropriate changes in response to challenge and feedback from colleagues (which likely relates to different school practices around collaboration) and believe in your ability to improve learning outcomes for all students you

teach. There is least variability between schools in responses to keep up to date with relevant knowledge about teaching and learning.

Figure 12 **Being professional—differences between schools**

Proportion of teachers in school saying very well (%)
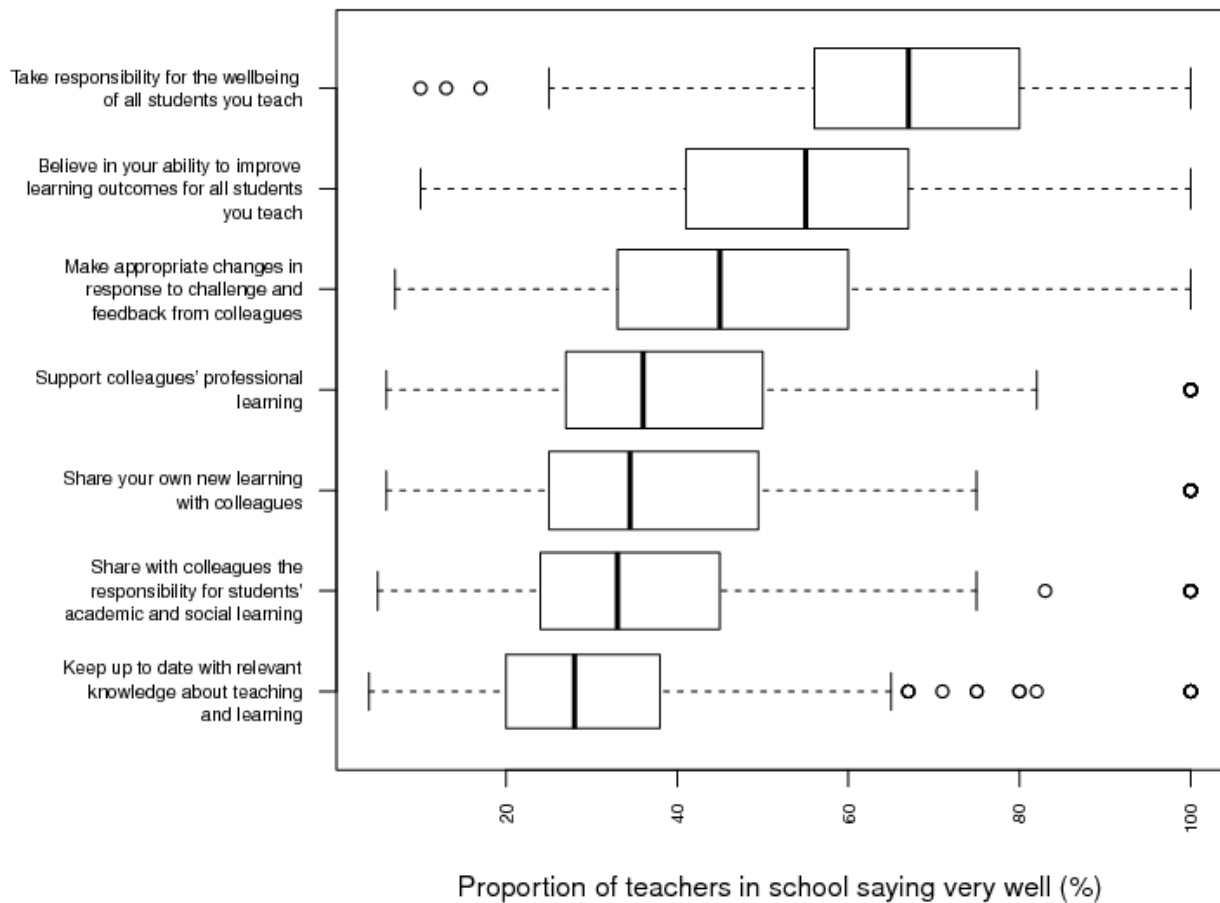
Differences in responses by school characteristics

We analysed the data for significant differences in responses of teachers by school type and decile.

Differences by school type

We found few differences in responses by school type. In the domain *Optimising students' opportunities to learn*, more teachers from contributing, full primary, and intermediate schools than those from secondary schools reported using flexible groupings to meet the changing needs of individual students well or very well. This most likely reflects that the practice of grouping students has tended to be more prevalent in primary schools. More teachers from secondary schools than those from contributing, full primary, and intermediate schools reported engaging in in-depth curriculum-related discussions with individuals or groups well or very well, most

likely reflecting the discipline-specific knowledge of secondary school teachers and the greater subject specialisation that occurs in secondary schools.

In the domain *Learning-focused partnerships*, more teachers from contributing, full primary, and intermediate schools than teachers from secondary schools reported using the knowledge that parents/whānau have about their child to support their child's learning well or very well.

Differences by decile

We found little difference in responses by school decile, although in the domain *Optimising students' opportunities to learn* somewhat more teachers from decile 5–10 schools than those at decile 1–4 schools reported engaging in in-depth curriculum-related discussions with individuals or groups well or very well.

Differences in response by teaching experience

We found more differences in relationship to teachers' own experience as a teacher.

Differences by years of teaching

More teachers with less than 3 years' experience thought that they carried out some—but not all—practices somewhat well or less well than those with more teaching experience. Often there was a linear pattern evident, with reports of carrying out a practice very well increasing with experience and, conversely, reports of carrying it out somewhat well or not well decreasing with experience.

In the *Optimising students' opportunities to learn* domain, the trend for those with the most experience to report carrying out practices very well is evident in all the items. It is most marked in these items:

- engaging students in specific and timely feedback and feedforward on their learning (27% of those with 11 or more years' experience, decreasing to 9% of those with less than 3 years' experience)
- engaging in in-depth curriculum-related discussions with individuals or groups (27% of those with 11 or more years' experience, decreasing to 11% of those with less than 3 years' experience)
- ensuring students learn from taking risks or experiments that did not succeed (29% of those with 11 or more years' experience, decreasing to 16% of those with less than 3 years' experience).

In the *Diversity, equity, and inclusion* domain more teachers with less than 3 years' experience than those with more experience thought that they carried out these practices somewhat well or not well:

- ensuring all students can achieve success while maintaining their own sense of identities and differences (25% of teachers with less than 3 years' experience, decreasing to 12% of those with 11 years or more experience)
- providing students with opportunities to use different approaches to demonstrate their learning; promoting understanding of others' perspectives and points of view (22% of teachers with less than 3 years' experience, decreasing to 12% of those with 11 years or more experience).

In the *Learning-focused partnerships* domain more teachers with less than 3 years' experience than those with more experience thought that they carried out the two community-oriented practices somewhat well or not well, probably reflecting their shorter time to make community connections.

In the *Teaching as inquiry* domain, teachers with less than 3 years' experience were most likely to think that they undertook the four practices we asked about somewhat well or not well, particularly in relation to using what the research literature says about teaching and learning to inform the choice of strategies (40% of teachers with less than 3 years' experience, decreasing to 22% of those with 11 years or more experience).

There were several differences in responses by years of teaching experience in the domain *Being professional.* Somewhat more teachers with over 11 years of experience reported:

- supporting colleagues' professional learning very well (40%, decreasing to 25% of those with less than 3 years' experience)
- keeping up to date with relevant knowledge about teaching and learning very well (32%, decreasing to 20% of those with less than 3 years' experience)
- believing in their ability to improve learning outcomes for all students they teach very well (59%, decreasing to 42% of those with less than 3 years' experience).

Differences by team-teaching

There was a slight linear trend for teachers reporting that they carried out practices very well to increase from those who did not team-teach, those who team-taught some of the time, to those who team-taught all the time. However, the differences were small apart from a few items:

- flexible groupings to meet the changing needs of individual students (48% of those who team-taught all the time said they did this very well, decreasing to 27% of those who did not)
- taking responsibility for the wellbeing of all the students taught (45% of those who team-taught all the time said they did this very well, decreasing to 29% of those who did not)
- providing students with opportunities to use different approaches to demonstrate their learning (41% of those who team-taught all the time said they did this very well, decreasing to 29% of those who did not)
- using parents' and whānau knowledge of their child to support the child's learning (27% of those who team-taught all the time said they did this very well, decreasing to 19% of those who did not)

- collaborating with parents and whānau to use their expertise to support class or school learning (27% of those who team-taught all the time said they did this very well, decreasing to 16% of those who did not)
- believing in their ability to improve learning outcomes for all students they taught (55% of those who team-taught all the time said they did this very well, decreasing to 43% of those who did not).

Discussion

Teachers' and teaching principals' perceptions of their practices were overall positive, with the majority reporting that they carried out most of the practices either well or very well.

The two practices rated most positively overall were those that lie at the heart of what it means to be a teacher; that is, teachers believing in their ability to improve learning outcomes for all the students they teach, and taking responsibility for the wellbeing of all the students they teach.

Not surprisingly, the practices teachers reported carrying out less well tended to be more future-oriented in focus—practices grounded in concepts that may be less familiar. These are practices related to concepts about: personalising learning and rethinking learners' and teachers' roles (such as ensuring students direct their own learning pace, content, and goals); views of equity and diversity (such as drawing on students' different languages, cultures, values, knowledges, and practices as resources for the learning of all); ideas about knowledge (such as ensuring students interact with information to critique and create knowledge and transform it); and new kinds of partnerships and relationships (such as collaborating with parents/whānau and with the local community so that their expertise can be used to support learning; and supporting the local community by ensuring students have opportunities to actively contribute to it in ways valued by the community).

According to the future-oriented research literature, these practices are important for building a coherent future-oriented learning system. It is, therefore, heartening to see evidence that these practices are emerging in the New Zealand context and the potential for further uptake and development—a potential made possible by the vision, values, and principles, and by the flexibile and enabling nature of *The New Zealand Curriculum* and *Te Matauranga o Aotearoa*.

4. School practices / He mahinga kura

Introduction

Here we focus on school practices that are associated in research with good outcomes for students and good working environments for teachers. We drew on the domains used in the Educational Leadership Practices survey, which was based on the Educational Leadership Best Evidence Synthesis[8] and the vision for New Zealand educational leadership set out in *Kiwi leadership for principals.* We also drew on more recent research which emphasises the value of collective leadership, fostering 'professional community' (Louis, 2015) and the capacity for "organisational learning" (Louis & Lee, 2016, p. 3). The domains are also consistent with the six evaluation indicators in ERO's *Leadership for equity and excellence* domain (ERO, 2016).

The domains in the School Practices survey are:

• School goals
• Supportive and caring environment
• Coherent curriculum and evaluation
• Learning-focused partnerships
• Strategic resource allocation
• Developing professional practice
    o Professional feedback and support
    o Professional community
    o Teaching as inquiry.

We report the national picture for each domain in turn. With each domain we give first the picture from teachers and principals, and then present the analyses by schools. The school picture is of the 343 schools where half or more of the teachers appeared to have responded to the TSP, and answered the School Practices section.[9]

Respondents were asked to indicate whether a particular practice was 'very like our school', 'moderately', 'a little', or 'not at all like our school'.

Principal and teacher views are similar for some domains. Principals tend to be more sanguine about some practices which individual teachers may not see in action, but also about the resources that teachers have for their work, particularly time to work together and on inquiry.

We looked, too, at whether views were related to school type and school decile. We found there were differences between school types, with teachers from secondary and, to a lesser extent,

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[8] https://www.educationcounts.govt.nz/publications/series/2515/60169/60170
[9] This leaves out responses from 52 schools.

intermediates, less likely to think that practices were 'very like our school'. We saw the same trend in the Educational Leadership Practices survey. It is not clear whether this is because these are larger schools, so some individual teachers may be less aware of what is happening, or that practice varies between, say, different subject areas or sections of a school. School decile, reflecting the socioeconomic circumstances of students, with higher teaching and learning challenges for low decile schools, was not related to differences in teacher views.

School goals / He whāinga ā-kura

Teacher and principal views

Figure 13 shows that the item most teachers see as 'very like our school' is that their school goals set high expectations for students, followed by how their goals are based on the use of good analysis and information about student learning. Next come aspects of goals related to their providing a purpose and direction, their use to review student progress, focus on Māori students, covering more than national measures of achievement, and the involvement of staff in their development and review. Items that are least 'very like our school' are about the application of goals: every student has challenging goals, and the school goals really do guide day-to-day work. A similar pattern was evident in the items about school goals asked in the Educational Leadership Practices survey national sample 2009–11.

Principals have prime responsibility for developing school goals, and this is evident in the higher proportions of principals compared with teachers who reported that it was 'very like our school' to have goals with high student expectations, based on good analysis that identified areas for improvement, gave a clear purpose and direction for their work, were used in regular review and, to a lesser extent, really did guide the day-to-day work of the school. Slightly fewer principals thought that every student had challenging goals than teachers, however.

Principal and teacher views were much the same when it came to the content of the goals, and staff role in their development.

Figure 13 **School goals**

Figure 13 **School goals**

Legend: No response | Not at all like our school | A little like our school | Moderately like our school | Very like our school

Teachers / **Principals**

Statement	Teachers (No response, A little, Moderately, Very)	Principals (A little, Moderately, Very)
School goals set high expectations for students	5 / 7 / 30 / 58	— / 25 / 71
School goals are based on good analysis of sound information about our students' learning that identify areas we can improve	5 / 10 / 36 / 48	5 / 31 / 63
School goals give us a clear purpose and direction for our work	5 / 11 / 38 / 44	5 / 31 / 61
There is regular review of how individual learners and groups of learners are progressing in relation to the goals	5 / 11 / 36 / 45	8 / 33 / 56
There are clear school-wide goals for the academic achievement of Māori students	6 / 13 / 36 / 43	14 / 35 / 46
Student outcomes in the school goals include personal capabilities as well as national measures such as National Standards or NCEA	7 / 13 / 38 / 40	14 / 38 / 42
Staff take a meaningful part in the development and review of the school vision and goals	15 / 39 / 39	16 / 45 / 37
Every student has challenging (stretch) learning goals	5 / 16 / 46 / 30	21 / 50 / 24
School goals really do guide our day-to-day work	14 / 5 / 17 / 39 / 26	7 / 10 / 42 / 38

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School views

When we look at the proportions of teachers in each school who judged an item to be 'very like our school' we find a wide range, from schools where all the teachers responding thought this, to schools where none of the teachers responding thought this, as shown in Figure 14. The range between schools in terms of the extent to which a practice is reported to be 'very like our school' is smaller for two items: every student has challenging (stretch) learning goals, followed by school goals really do guide our day-to-day work. These two items also had the lowest median proportion of schools in which they were 'very like our school'.

Figure 14 **School goals—variability across schools**

Proportion of teachers in school saying very like our school (%)
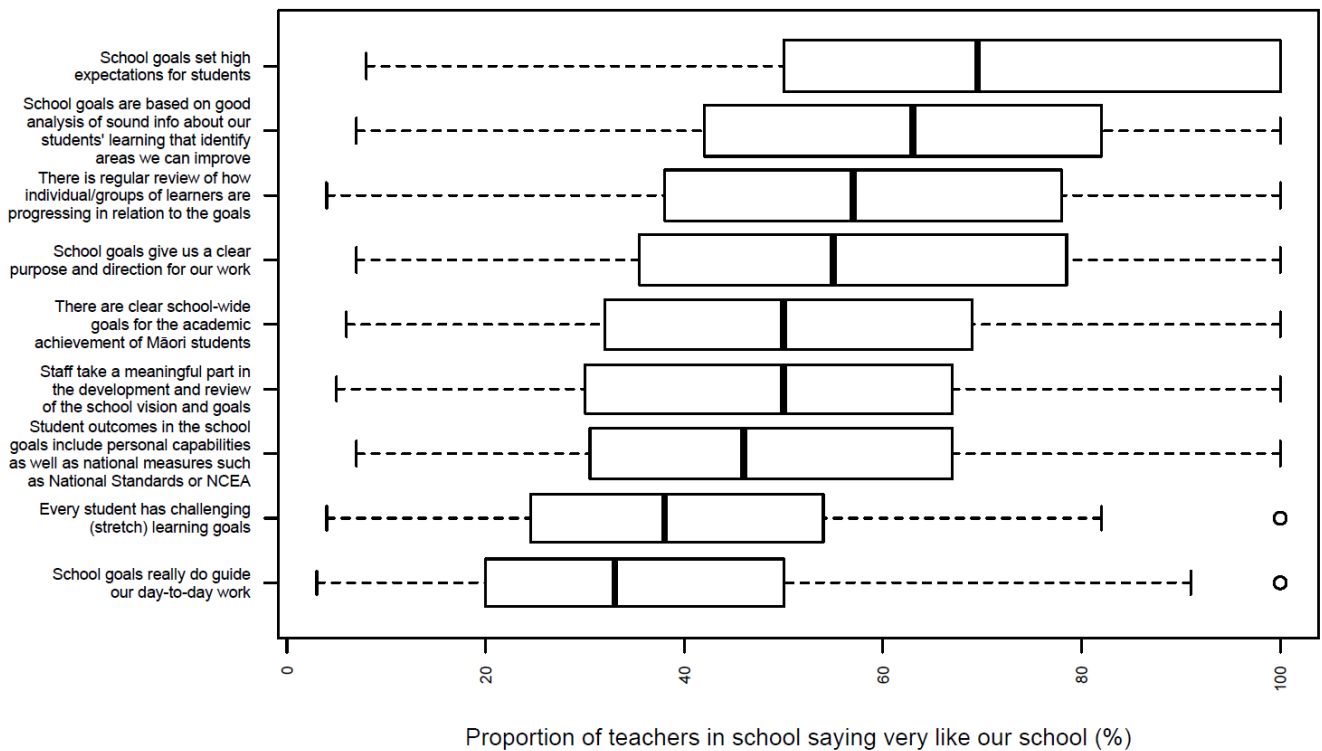
Supportive and caring environment / He ao tautoko, he ao manaaki

Teacher and principal views

This domain shows the most agreement among teachers that the practices we asked about were 'very like our school'. Between 50% and 61% of teachers thought that about six of the nine practices we included in the *Supportive and caring environment* domain. Fewer teachers thought it was very like their school that student views about teaching and learning were used to improve things, teaching happened in ways that promoted Māori students' belonging in the school, and that students actively cared for and supported each other.

Figure 15 shows that teachers and principals had similar perceptions of how well their school included students, and supported their safety and wellbeing. They did differ when it came to the quality of support among students, and among staff. Principals were more positive that their school provided a supportive working environment, that staff would back each other, that students actively cared for and supported each other, and that the school was a positive environment in which student learning was the central focus.

Figure 15 **Supportive and caring environment**
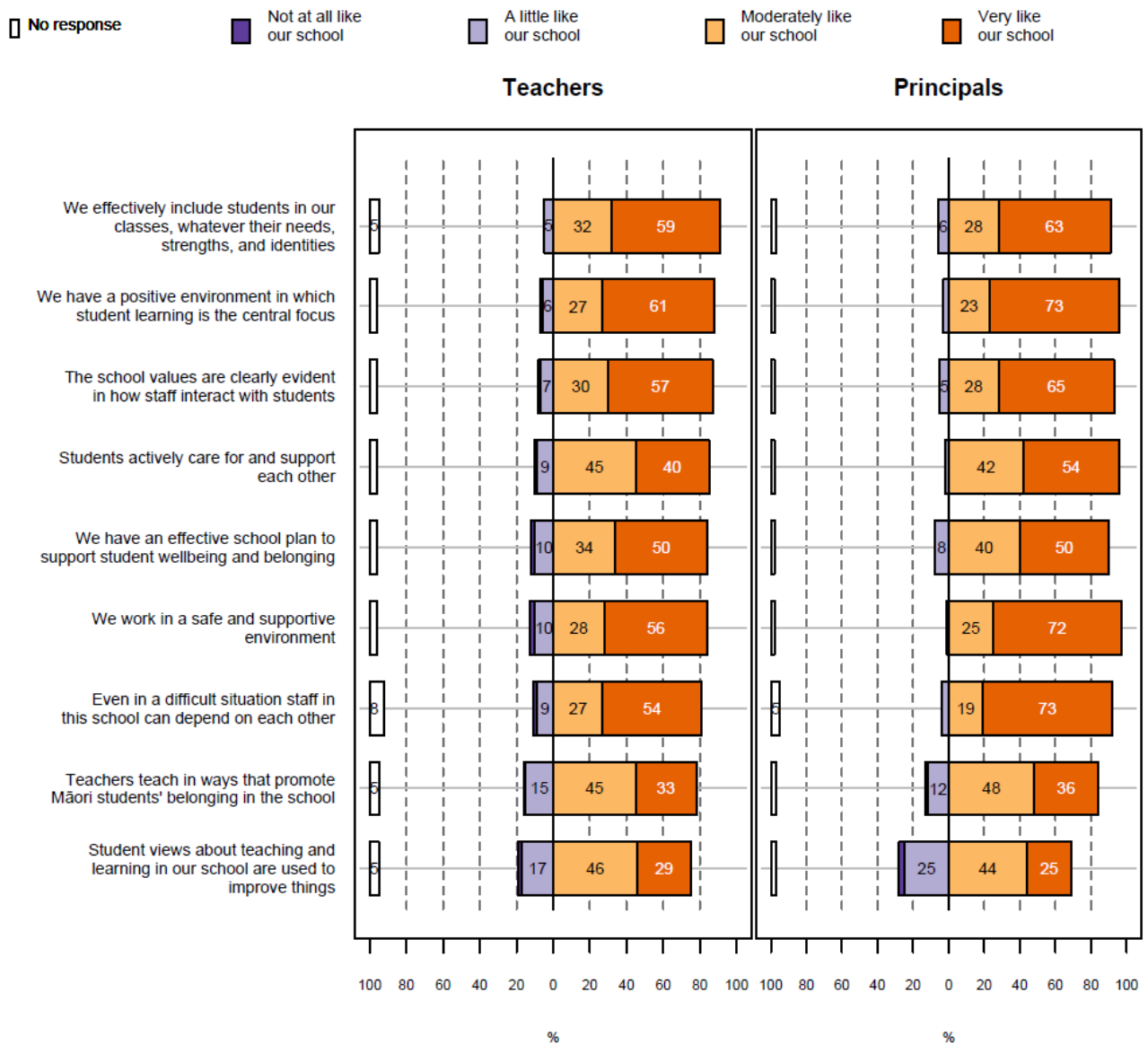
School views

Figure 16 shows the wide-ranging differences between schools in the proportion of teachers in a school thinking that a practice was 'very like our school' for this domain. There is somewhat less variability between schools for the item 'school views about teaching and learning in our school are used to improve things' than for the other eight items in this domain.

Figure 16 **Supportive and caring environment—variability across schools**

Proportion of teachers in school saying very like our school (%)

47
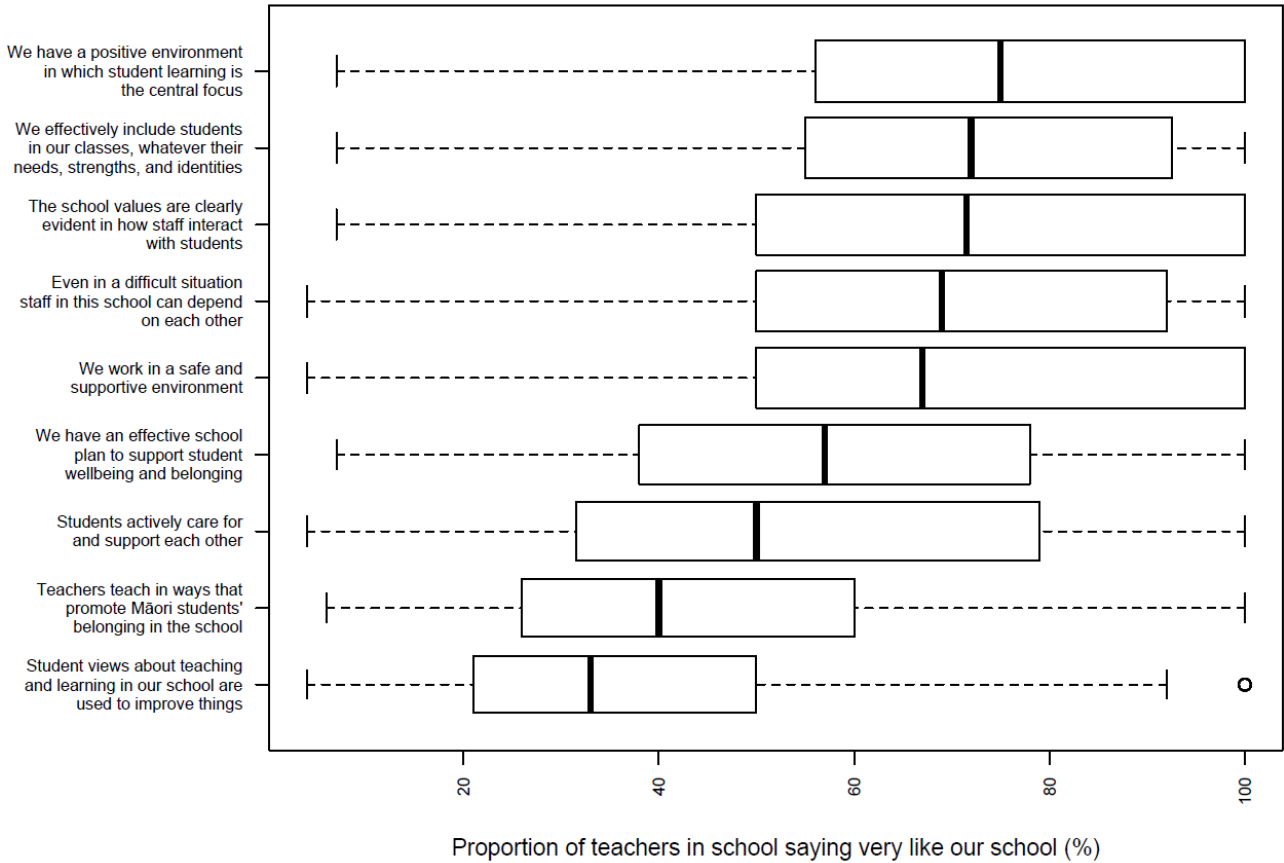
Coherent curriculum and evaluation / He marau mārama, he arotake hoki

Teacher and principal views

Three practices were thought by 44% to 46% of teachers to be 'very like our school', which focuses on having and using information about student learning. These are using assessments specific enough to allow evaluation of their teaching practice, sharing information about individual students across year levels and curriculum areas, and systematic monitoring of each student's progress. Least likely among the nine items in this domain to be thought 'very like our school' was the responsiveness of curriculum to the identities of Māori students, followed by culturally responsive pedagogy.

Figure 17 shows that teachers and principals have very similar views when it comes to how responsive their school's curriculum is to individual students, and the extent to which there is attention to the student journey through the school. Principals are somewhat more positive than teachers about how readily information is shared across year levels and learning areas and that systematic monitoring of student progress occurs. They are less positive that teachers of students in adjacent year levels have a clear picture of how their curriculums fit together.

Figure 17 **Coherent curriculum and evaluation**
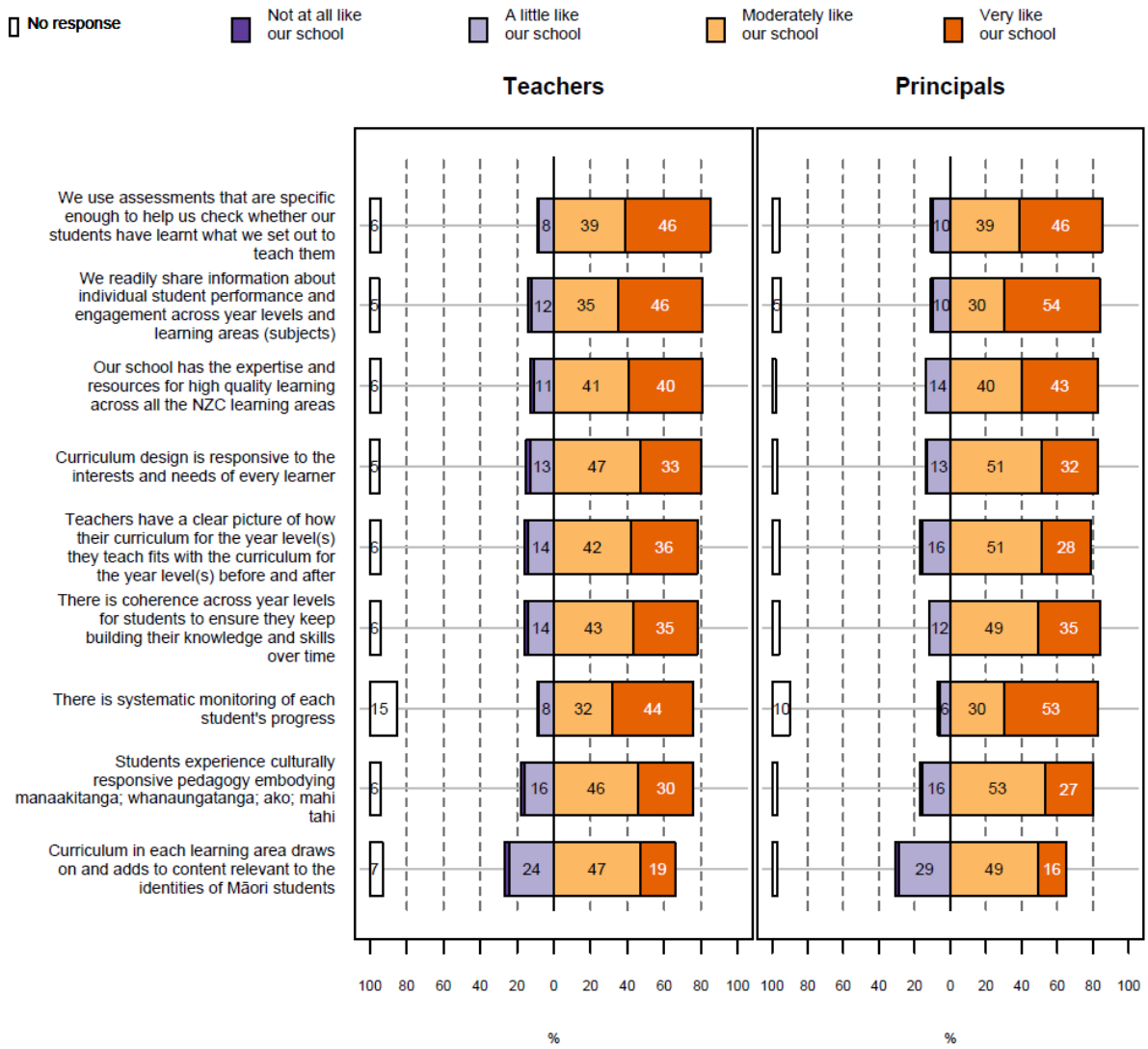
School views

Again, schools differ widely in terms of their proportion of teachers who think that a practice is 'very like our school', as shown in Figure 18. Having curriculum in each learning area that draws on and adds to content relevant to the identities of Māori students shows the smallest range across schools among the nine items in this domain.

Figure 18 **Coherent curriculum and evaluation—variability across schools**

Proportion of teachers in school saying very like our school (%)
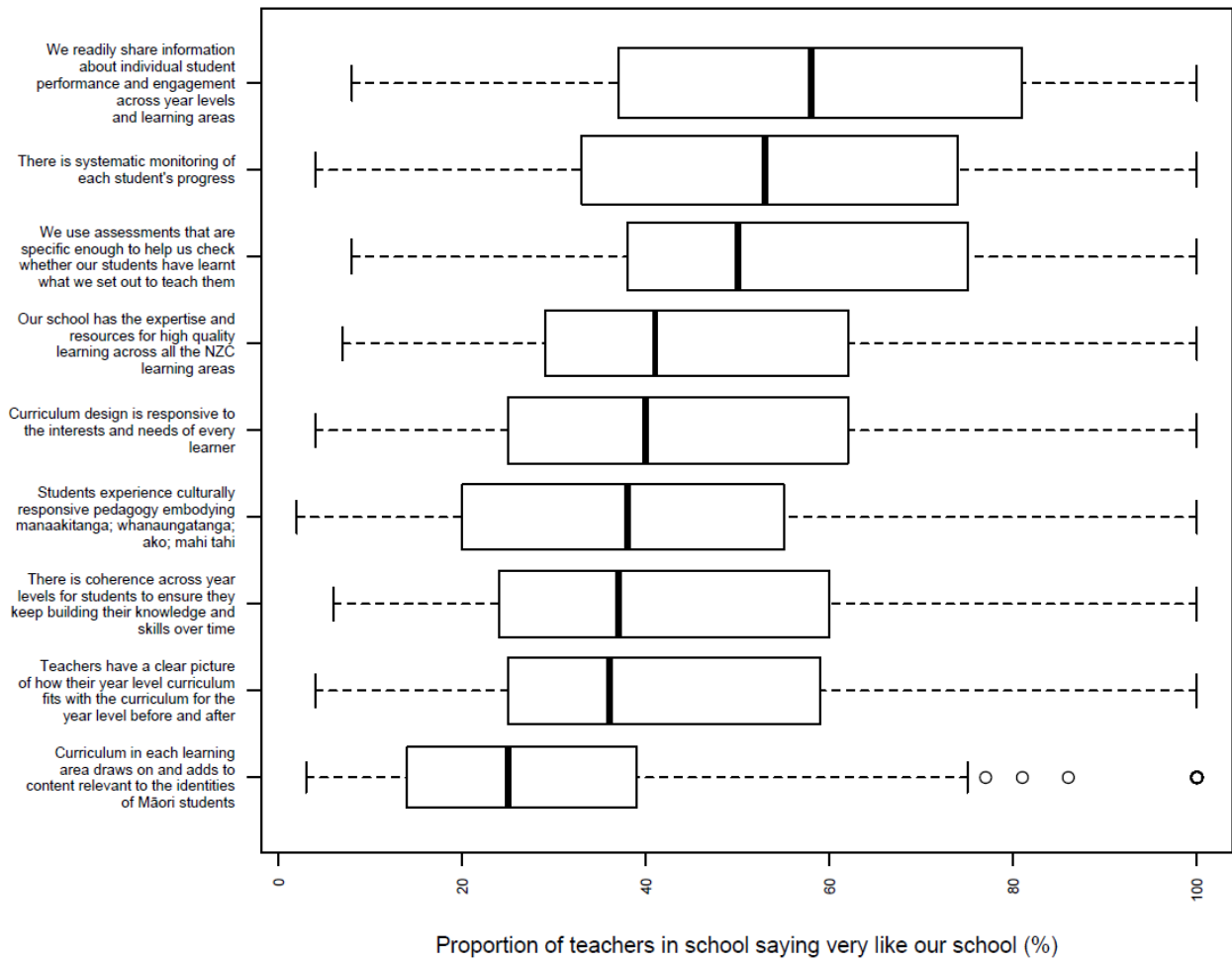
Learning-focused partnerships / He mahi tahi, he ako te hua

Teacher and principal views

Welcoming questions from parents and whānau about their child's learning was 'very like our school' for just over two-thirds of the teachers. Around half also saw that it was 'very like our school' to seek and respond to parents' and whānau views about their child's school learning and provide them with opportunities to learn how to effectively support that learning. It was less common for them to think that it was very like their school to seek opportunities to learn from parents and whānau in relation to the effective support of their child's learning. Around a fifth were actively seeking the expertise of the local community, hapū, and iwi.

Figure 19 shows that teachers and principals have similar views about how well their school seeks and responds to parents' and whānau views, and seeks expertise from the local community, hapū, and iwi. Teachers are somewhat more positive than principals about two-way opportunities for schools and parents and whānau to learn from each other how to effectively support a child's school learning.

Figure 19 **Learning-focused partnerships**
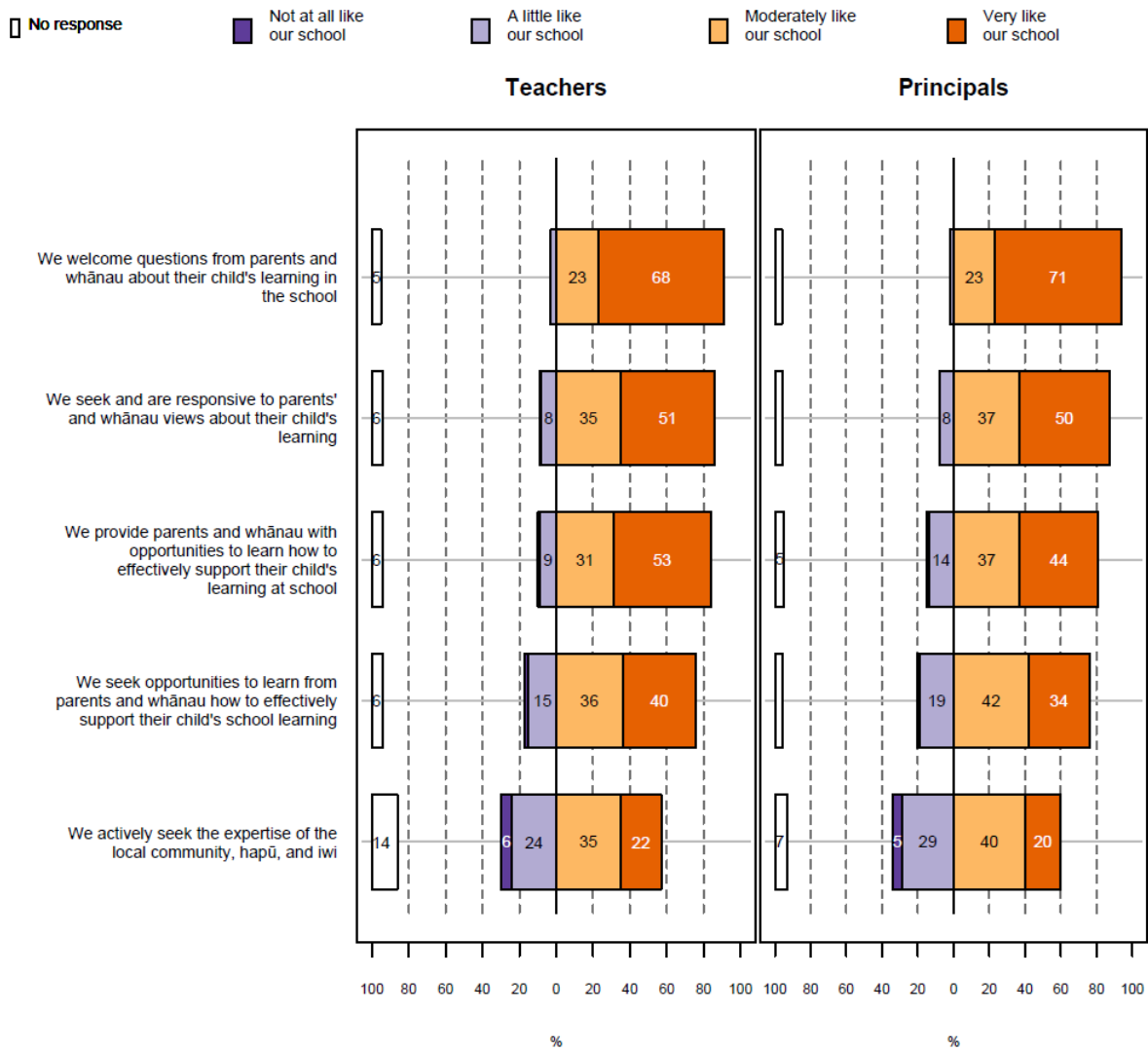
School views

Schools varied widely in how much their teachers thought the practices we asked about in relation to learning-focused partnerships were 'very much like our school'. Figure 20 shows that there was less variability in the proportion of teachers thinking this was so around welcoming questions from parents and whānau about their child's learning, and around actively seeking the expertise of the local community, hapū, and iwi.

Figure 20 **Learning-focused partnerships—school views**

Proportion of teachers in school saying very like our school (%)
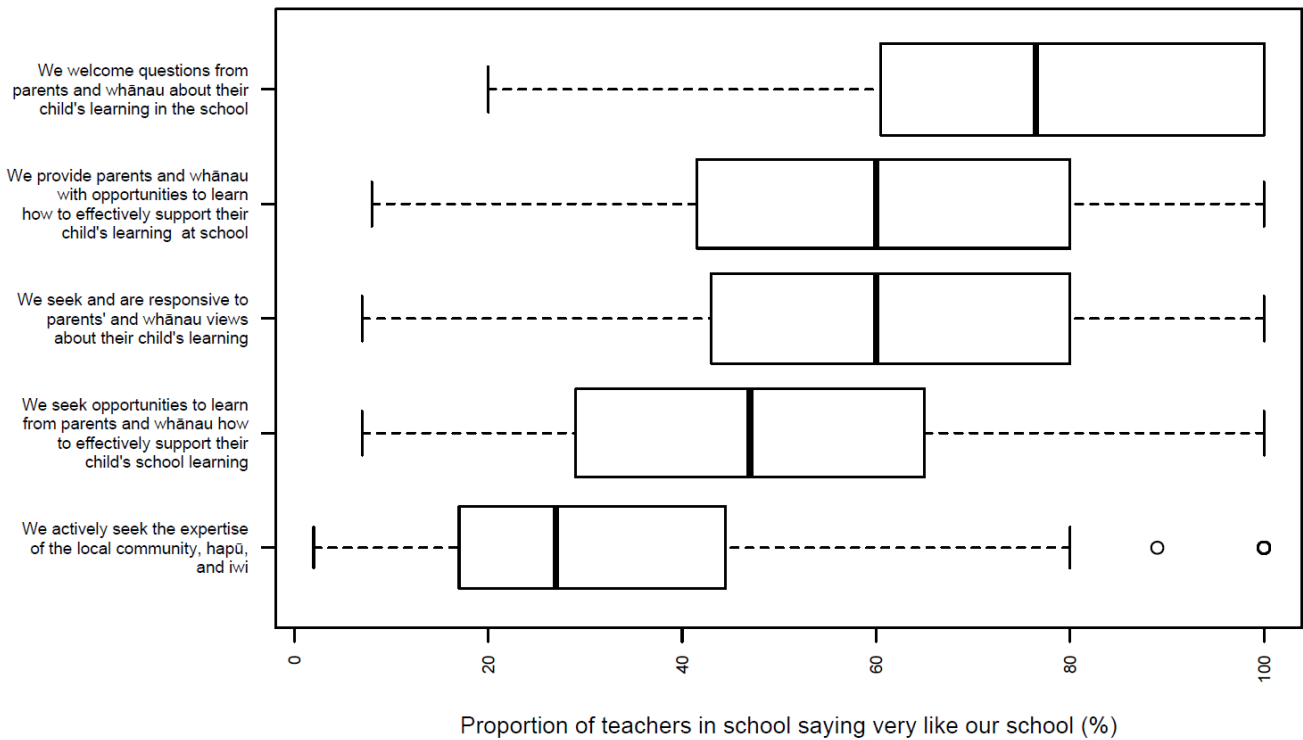
Strategic resource allocation / He rautoki toha rauemi

Teacher and principal views

This is the domain with the lowest proportion of teachers gauging that the items are 'very like our school', ranging from 25% saying this is true of having effective teaching resources aligned to the school goals readily available, to 17% saying this is true for teachers having sufficient time to collaborate (Figure 21).

More principals than teachers thought that the key school resource of time was sufficiently available and protected, and far more that the teaching resources the school had were effective, aligned to the school goals, and readily available.

Figure 21 **Strategic resource allocation**
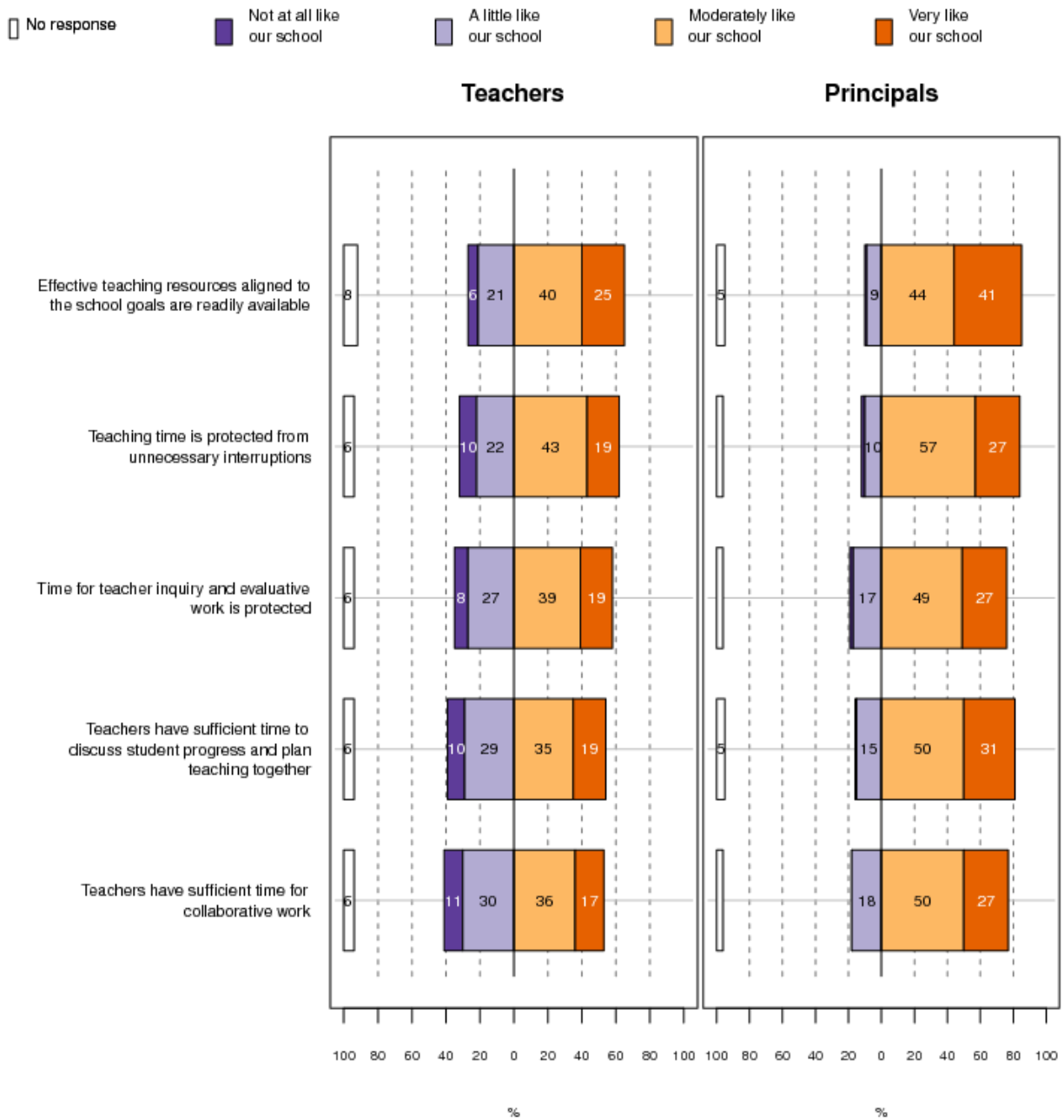
School views

Differences between schools in terms of the proportion of teachers who report that the strategic resource allocation items are 'very like our school' are smaller than for the other domains. Variability in the proportion of teachers in a school thinking this is most evident in relation to having readily available effective teaching resources aligned to the school goals, and least evident in relation to the protection of teacher time for inquiry and evaluative work, as shown in Figure 22.

Figure 22 **Strategic resource allocation—school views**

Proportion of teachers in school saying very like our school (%)
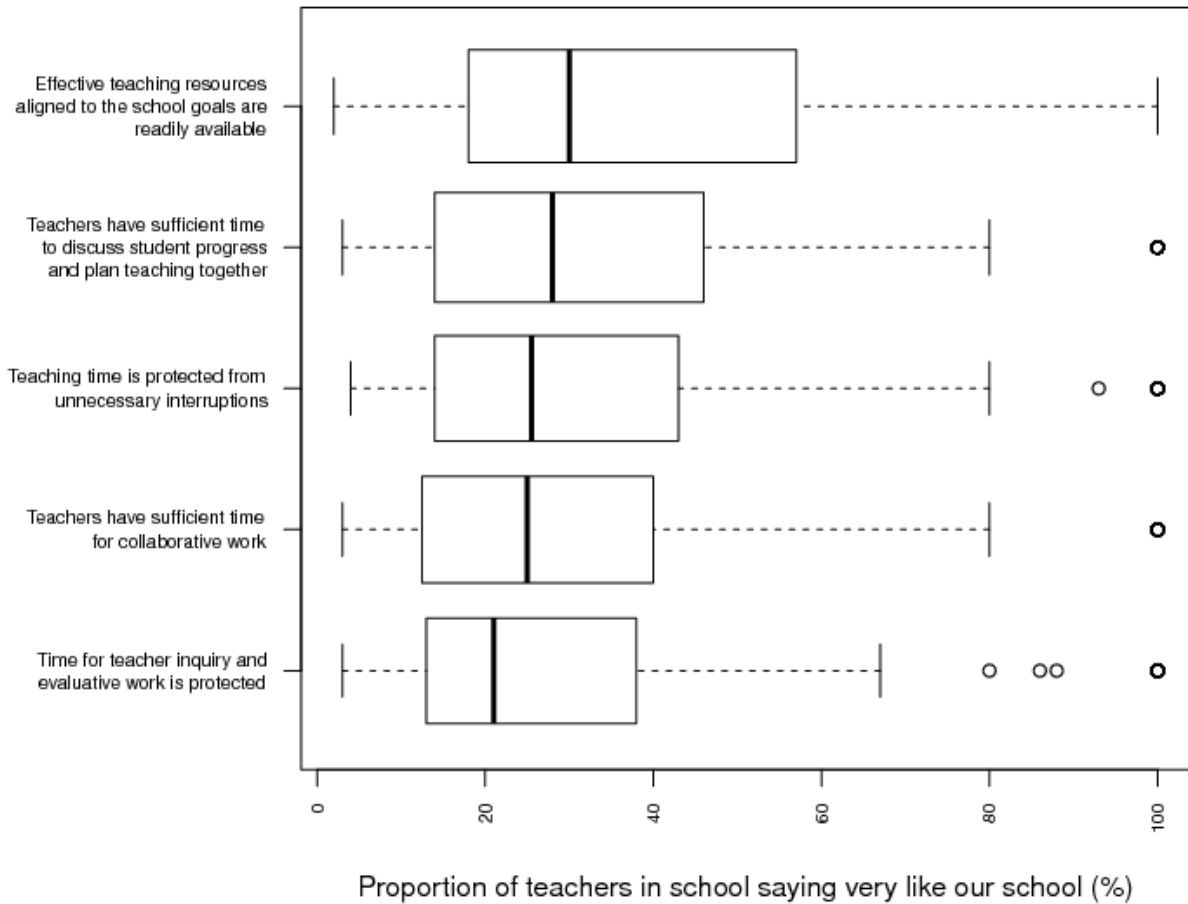
Professional feedback and support / He tautoko, he whakahoki kōrero, ki te kiako

Teacher and principal views

One item in this set stands out, with 44% of teachers gauging that appraisal focuses on improving teaching practices and outcomes for students is 'very like our school'. The other three items have 27%–30% of teachers seeing them as 'very like our school', as shown in Figure 23.

Teachers and principals have similar views about teachers in the school getting meaningful feedback for their practice. Principals are somewhat more positive than teachers about whether appraisal focuses on improving the quality of teaching practice, and the support given to teachers having difficulty, and a little more positive than teachers about the guidance given to teachers new to the school.

Figure 23 **Professional feedback and support**
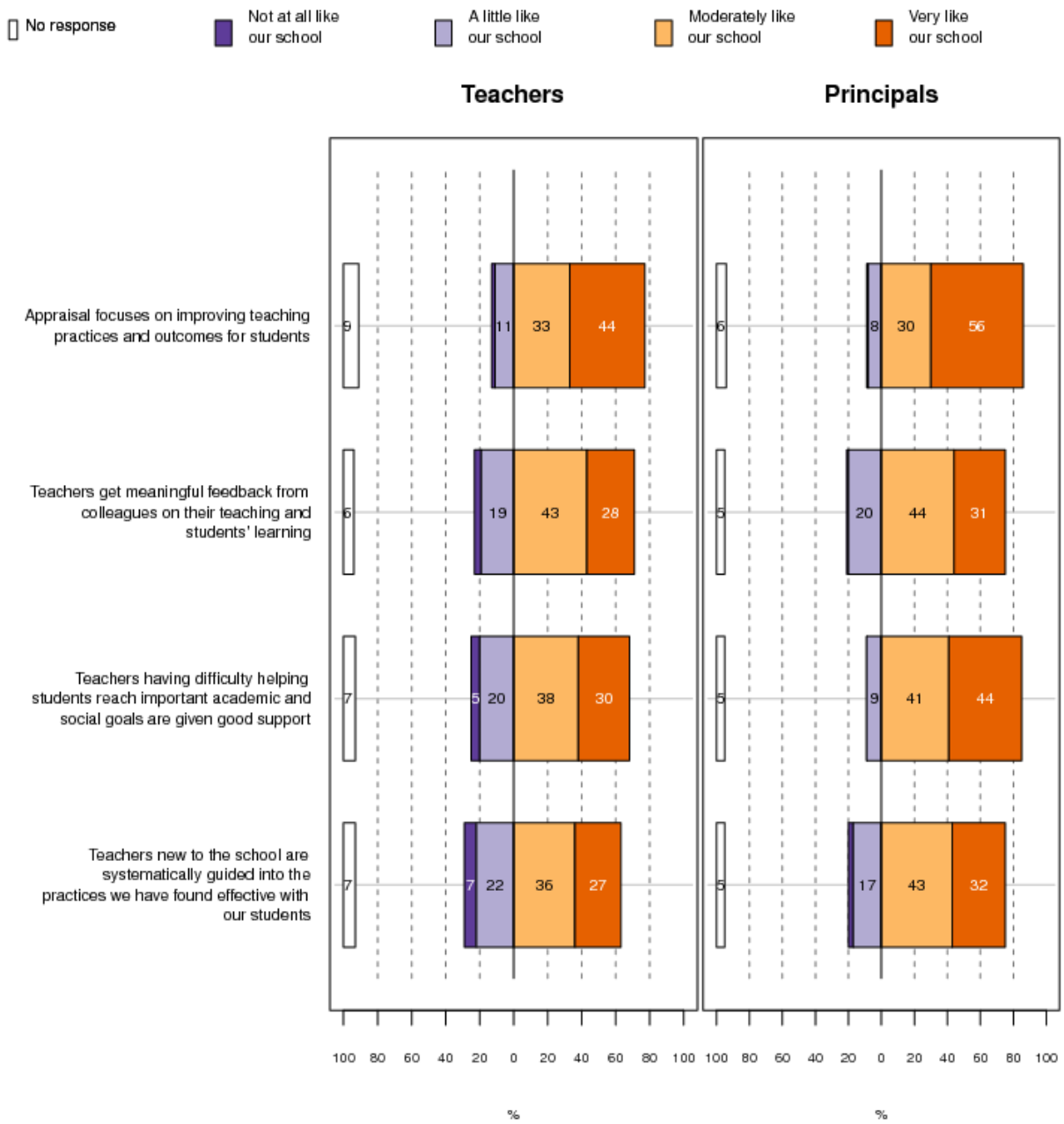
School views

Figure 24 shows that the proportion of teachers in a school who think that these practices are 'very like our school' ranges widely between schools. There is somewhat less variability across schools in relation to teachers getting meaningful feedback from colleagues, and the systematic guidance of new teachers into practices the school has found effective.

Figure 24 **Professional feedback and support—school views**

Proportion of teachers in school saying very like our school (%)
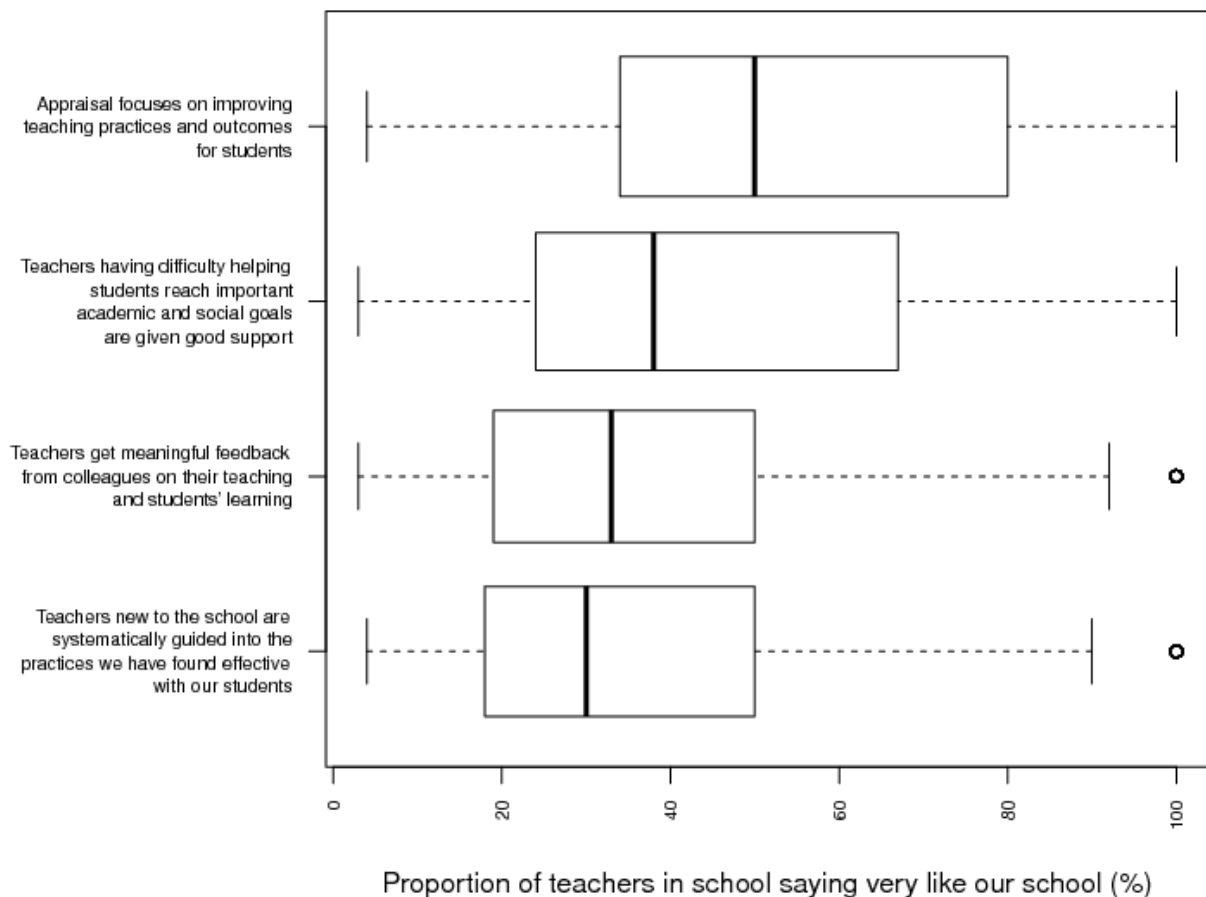
Professional community / He kāhui ako

Teacher and principal views

The eight items in this domain fall into three sets when we look at the proportions of teachers who see them as 'very like our school'. Around half the teachers said that for things that don't work well are seen as opportunities for learning, and we regularly share student progress within teaching teams and discuss strategies to improve the progress of students who are of concern.

Between 41% and 44% of teachers see as 'very like our school' that staff share knowledge about individual students, that staff take the initiative to identify and solve problems, and discuss social and economic trends in relation to their teaching. Between 36% and 38% of teachers see this as being the case in relation to trust between teachers and leaders, the addressing of concerns teachers raise, and finding observations of each other's teaching a valuable source of learning.

The most marked differences between teacher and principal views of school practices shown in Figure 25 occur in relation to the addressing of teacher concerns, and trust between teachers and leaders. Principals are much more sanguine that these occur well than are teachers.

Principals are also somewhat more sanguine about other aspects that constitute a good professional community in a school, such as sharing of knowledge and strategies to help individual students. Teachers and principals have similar views in relation to the use of observations of teaching, and discussing teaching in the light of social and economic trends.

Figure 25 **Professional community**
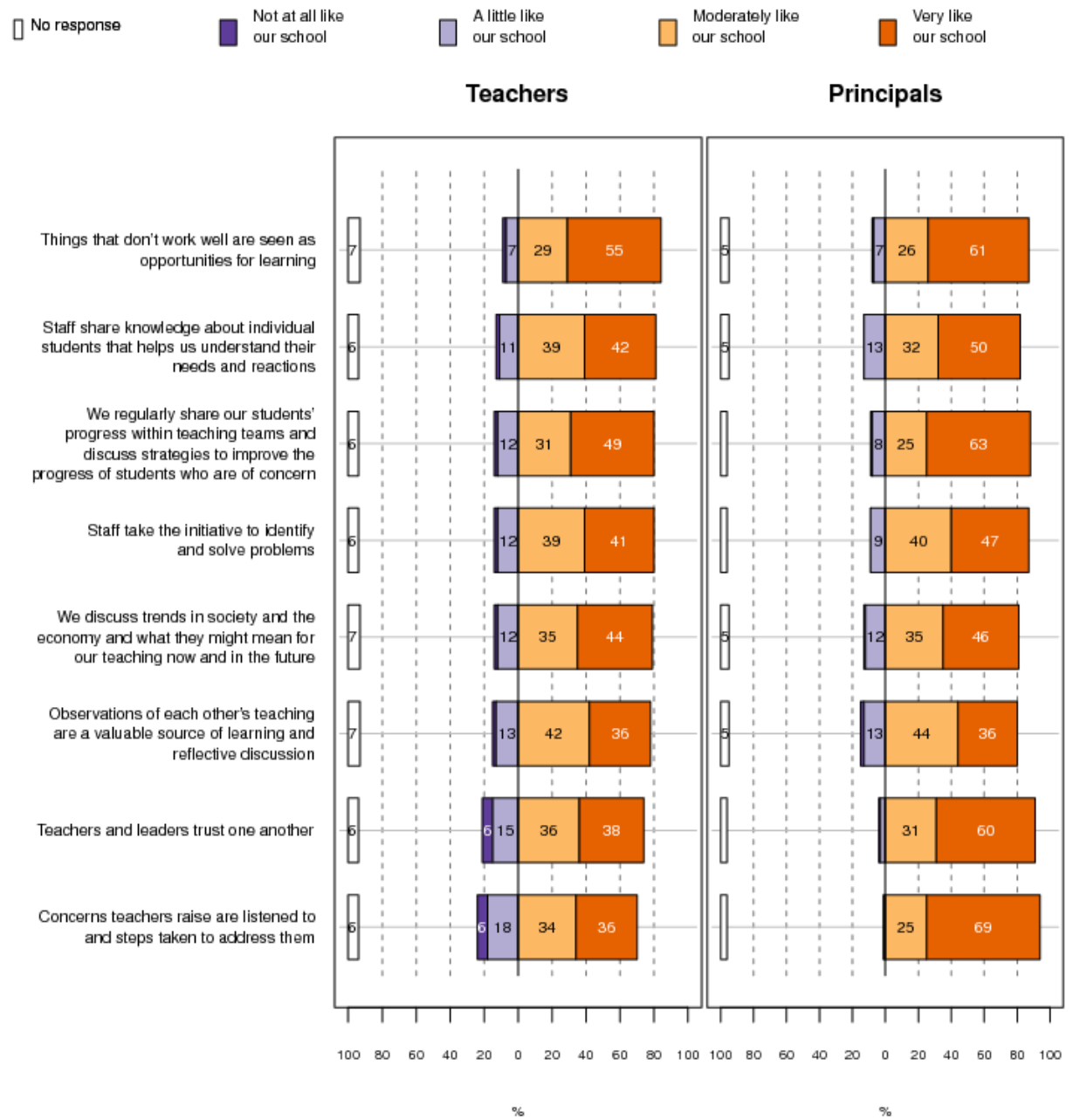
School views

Figure 26 shows that schools span a wide range when it comes to the proportion of their teachers who see that the practices that support professional community are 'very much like our school'. The practice of observation of each other's teaching providing a valuable source of learning and reflective discussion has the lowest median proportion of teachers per school saying that it is 'very much like our school'.

Figure 26 **Professional community—school views**

Proportion of teachers in school saying very like our school (%)
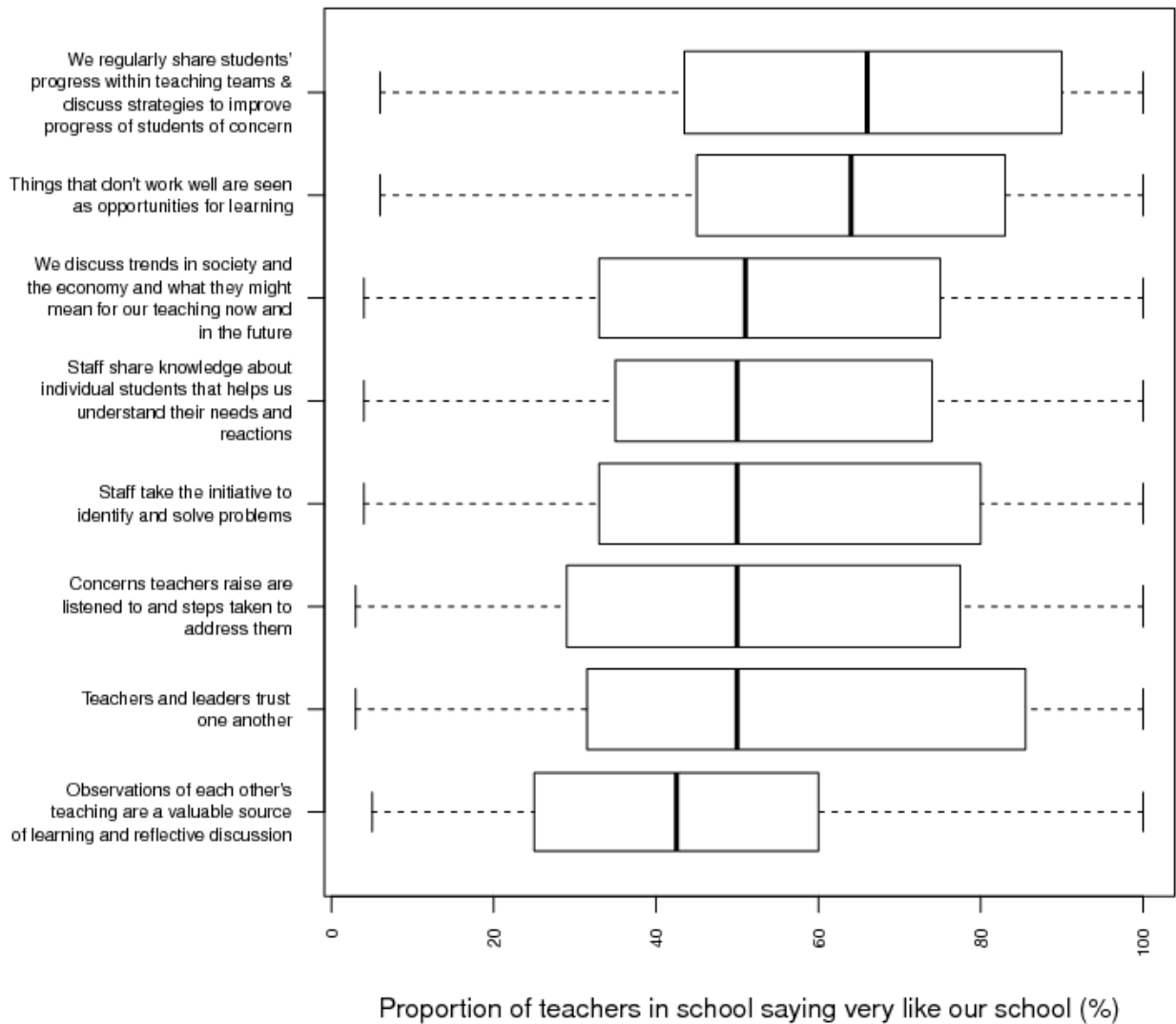
Teaching as inquiry / He whakaako pakirehua

Teacher and principal views

Half the teachers see that it is 'very like our school' to look into a range of evidence to understand students struggling with their learning. Thirty-eight percent thought this was also the case for staff engagement in inquiry. However, fewer thought that it was 'very like our school' that teachers had a shared understanding of the process of inquiry, and that inquiry had been used to make worthwhile changes to teaching and learning. Figure 27 has the details.

Teachers and principals had similar views on the extent of inquiry in their school, and whether it was used to make worthwhile changes in teaching and learning. More principals saw the use of a range of evidence than did teachers. Fewer principals than teachers thought that there was a shared understanding of the process of inquiry at their school.

Figure 27 **Teaching as inquiry**
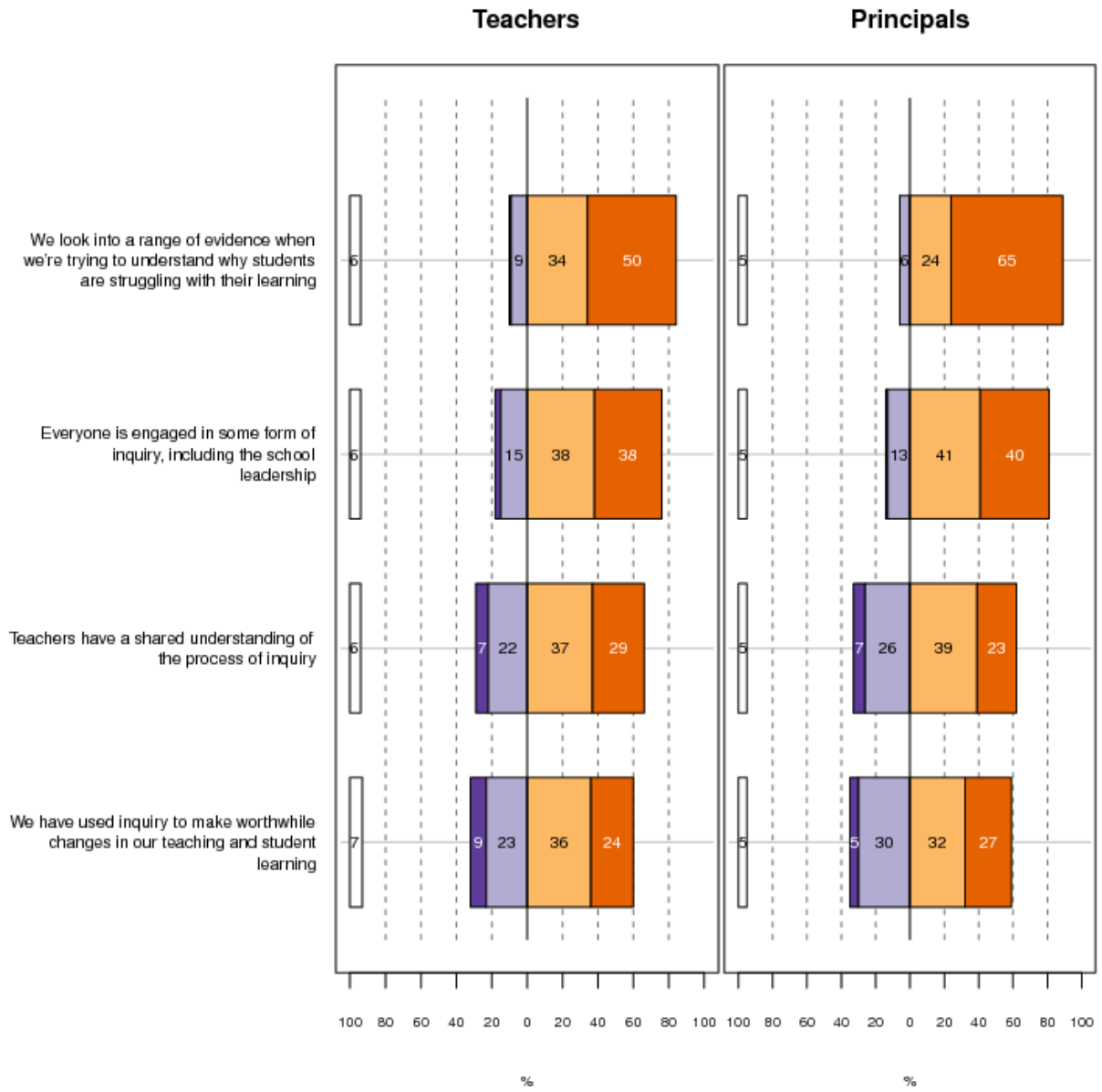
School views

Figure 28 shows that there are wide differences between schools in terms of their proportion of teachers who say that the teaching as inquiry practices asked about are 'very like our school'. Variability is lower in relation to having a shared understanding of the process of inquiry, and using it to make worthwhile changes.

Figure 28 **Teaching as inquiry—school views**

Proportion of teachers in school saying very like our school (%)
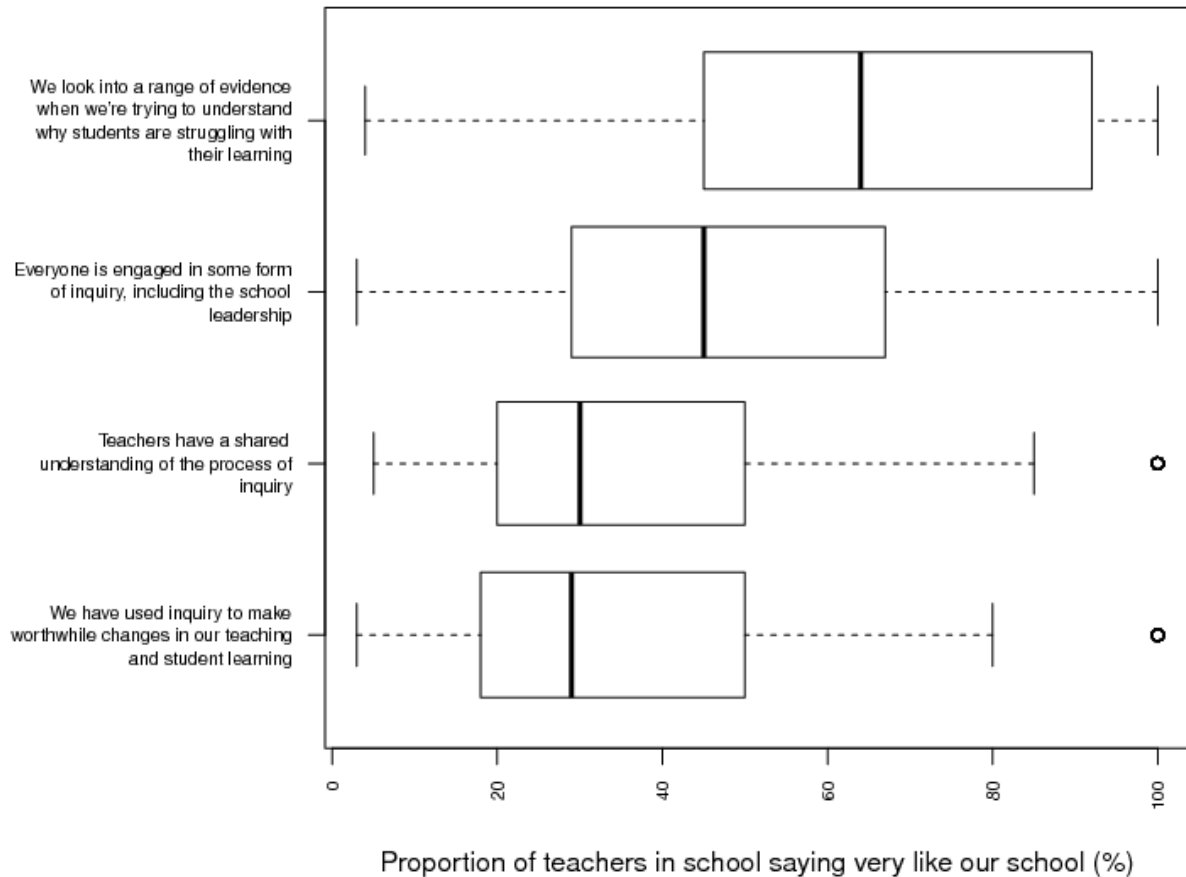
Differences by school type

Teacher views

On the overall School Practices scale, the median score was higher for primary teachers than secondary teachers. What does this look like when we focus on the domains and individual items?

Generally, it means that primary and special school teachers were much more likely than others to report that a given school practice was 'very like our school', and less likely to say that a given school practice was 'a little like' or 'not at all like our school'.

Intermediate and area school teachers' views' reports were generally somewhat lower than their primary school colleagues, and somewhat higher than their secondary school colleagues. Some of the differences between school types may reflect size and greater subject specialisation providing a more complex organisation that makes it harder to achieve a consistent set of school practices. Secondary, intermediate, and area school teachers may also have less of a sense of how strong a practice is if they operate mainly within a limited section of the school.

There was one domain, *Coherent curriculum and evaluation*, where these school-type differences were somewhat *less* apparent. The four items of nine in this domain where differences between primary and secondary were not apparent were:

- our school has the expertise and resources for high quality learning across all the NZC learning areas
- there is coherence across year levels for students to ensure they keep building their knowledge and skills over time
- teachers have a clear picture of how their curriculum for the year level(s) they teach fits with the curriculum for the year level(s) before and after
- we use assessments that are specific enough to help us check whether our students have learnt what we set out to teach them.

Other domains had just one or two items where there was no difference evident between primary and secondary teacher responses. The items were:

- clear school-wide goals for the academic achievement of Māori students
- student views about teaching and learning in our school are used to improve things
- time for teacher inquiry and evaluative work is protected
- teachers new to the school are systematically guided into the practices we have found effective with our students
- appraisal focuses on improving teaching practices and outcomes for students
- observations of each other's teaching are a valuable source of learning and reflective discussion
- things that don't work well are seen as opportunities for learning
- teachers have a shared understanding of the process of inquiry.

Principal views

Numbers allowed us to compare the views of principals from contributing and full primary schools, and secondary schools, but not intermediates (*n* = 13), area schools (*n* = 8), or special schools (*n* = 4).

There are fewer differences related to school type in principals' view of the items in the School Practices section.

Below are the items where secondary principals were markedly less likely to say that a practice was 'very like our school', a pattern more akin to the patterns found for teachers' views. One domain is prominent:

Supportive and caring environment

- we have a positive environment in which student learning is the central focus
- the school values are clearly evident in how staff interact with students
- students actively care for and support each other
- we effectively include students in our classes, whatever their needs, strengths, and identities
- even in a difficult situation, staff in this school can depend on each other.

Items from other domains:

- there is systematic monitoring of each student's progress
- staff take a meaningful part in the development and review of the school vision and goals
- every student has challenging (stretch) learning goals
- we provide parents and whānau with opportunities to learn how to effectively support their child's school learning
- teachers having difficulty helping students reach important academic and social goals are given good support
- teachers and leaders trust one another
- we regularly share our students' progress within teaching teams and discuss strategies to improve the progress of students who are of concern.

Differences related to school decile

Teacher views

There was no difference evident in the responses of teachers from different decile schools in the domains of *School goals*, *Learning-focused partnerships*, or *Strategic resource allocation*, *Professional feedback and support, Professional community,* or *Teaching as inquiry.*

In the *Supportive and caring environment* domain there was generally a gradual increase in the proportion of teachers who saw the items as 'very like our school' from decile 1–2 teachers to decile 7–10 teachers, with a difference of usually around 11–13 percentage points between decile 1–2 teachers and decile 7–10 teachers. This percentage point difference was somewhat higher for the item students actively care for and support each other. This pattern was not evident in relation to the items:

- we effectively include students in our classes, whatever their needs, strengths, and identities
- even in a difficult situation staff in this school can depend on each other.

The pattern was reversed for one item, with more decile 1–2 teachers saying the practice was 'very like our school': teachers teach in ways that promote Māori students' belonging in the school.

In the *Coherent curriculum and evaluation* domain, school decile showed some relationships with teacher reports of their school practice. Consistent with the previous item, decile 1–2 teachers were most likely to say it was 'very like our school' that students experience culturally

responsive pedagogy, and that curriculum in each learning area draws on and adds to content relevant to the identities of Māori students.

There was a gradual increase from decile 1–2 to decile 7–10 in the proportion of teachers reporting these practices as 'very like our school':

- our school has the expertise and resources for high quality learning across all the NZC learning areas
- there is coherence across year levels for students to ensure they keep building their knowledge and skills over time
- teachers have a clear picture of how their curriculum for the year level(s) they teach fits with the curriculum for the year level(s) before and after
- we use assessments that are specific enough to help us check whether our students have learnt what we set out to teach them
- there is systematic monitoring of each student's progress.

Principal views

School decile was largely unrelated to principal responses. It was evident in just a few items, with an increase in those saying an item was 'very like our school' from decile 1–2 school principals, to decile 7–10 school principals. These items were:

- we have a positive environment in which student learning is the central focus
- our school has the expertise and resources for high quality learning across all the NZC learning areas
- effective teaching resources aligned to the school goals are readily available
- everyone is engaged in some form of inquiry, including the school leadership.

Differences related to team-teaching

Do teachers who team-teach have a different set of school conditions to support what they do? There are signs that they do, in some domains, but the differences are not substantial apart from this *Strategic resource allocation* item:

- teachers have sufficient time for collaborative work (29% of those who always team-teach say this is 'very like our school', 17% of those who sometimes team-teach, and 14% of those who don't team-teach),

and this item from the *Professional community* domain:

- we regularly share our students' progress within teaching teams and discuss strategies to improve the progress of students of concern (63% of those who always team-teach say this is 'very like our school', 52% of those who sometimes team-teach, and 44% of those who don't team-teach).

Interestingly, team-teachers are no more likely than others to have sufficient time for other work together, or for inquiry and evaluation.

In the *School goals* domain, the largest differences (10 percentage points or more between those who team-teach always and those who don't) are evident in these two items:

- staff take a meaningful part in the development and review of the school vision and goals (49% of those who always team-teach say this is 'very like our school', 40% of those who sometimes team-teach, and 36% of those who don't team-teach)
- regular review of the progress of individual learners and groups of learners in relation to school goals (54% of those who always team-teach say this is 'very like our school', 46% of those who sometimes team-teach, and 43% of those who don't team-teach).

In the *Safe and caring environment* domain, the largest differences are:

- school values are clearly evident in how staff interact with students (66% of those who always team-teach say this is 'very like our school', 59% of those who sometimes team-teach, and 54% of those who don't team-teach)
- we effectively include students in our classes, whatever their needs, strengths, and identities (69% of those who always team-teach say this is 'very like our school', 60% of those who sometimes team-teach, and 56% of those who don't team-teach).

Three of the five items in the *Learning-focused partnerships* domain show some differences:

- we welcome parent and whānau questions about their child's school learning (77% of those who always team-teach say this is 'very like our school', 70% of those who sometimes team-teach, and 65% of those who don't team-teach)
- we provide parents and whānau with opportunities to learn how to effectively support their child's school learning (63% of those who always team-teach say this is 'very like our school', 55% of those who sometimes team-teach, and 50% of those who don't team-teach)
- we seek opportunities to learn from parents and whānau how to effectively support their child's school learning (49% of those who always team-teach say this is 'very like our school', 45% of those who sometimes team-teach, and 36% of those who don't team-teach).

Interestingly, there are no differences related to the *Coherent curriculum and evaluation* domain. The differences in the *Teaching as inquiry* domain items with teachers saying they are 'very like our school' range from 8 to 11 percentage points between those who team-teach and those who don't.

These patterns are of interest in the current move towards innovative learning environments which encourage more team-teaching. They suggest that there are some differences in practice, which are not yet widespread among all those who team-teach, and their schools. Harnessing all the possibilities of more collaborative work for student learning has yet to occur for many teachers.

Discussion

Where are New Zealand school practices that are related in the research literature with good student outcomes and good working environments for teachers strongest, and where are they weakest?

Table 9 shows the average (mean) proportion of teachers reporting that a practice is 'very like our school' for each of the domains we include in the School Practices section. Using this indicator, the strongest practices appear to be related to the domains *Supportive and caring environment* and *Learning-focused partnerships*. The least strong practices appear to be in the domain *Strategic resource allocation*.

Table 9 **School Practices domains—average proportion of teachers reporting practices are 'very like our school'**

Domain	Means
Supportive and caring environment	48.7
Learning-focused partnerships	46.8
Professional community	42.6
School goals	41.4
Coherent curriculum and evaluation	36.6
Teaching as inquiry	35.2
Professional feedback and support	32.2
Strategic resource allocation	19.8

There is considerable variance between schools in relation to most of the school practices asked about, indicating on the one hand that there is no shortage of examples of strong practice to share and draw from in New Zealand schools, and on the other, that existing structures of support, knowledge, and experience sharing frameworks for schools to operate in, resources for them to use, particularly teacher time and how it is arranged, and systems of accountability, are not working coherently to support strong practice across the board.

There are also some specific items that stand out in terms of showing the least variance among schools, coupled with relatively low proportions of teachers saying that they are 'very like our school'. These indicate aspects of practice that the majority of schools may be finding particularly challenging to embed. They include some aspects of collaboration and inquiry that are currently being relied on as levers to improve student outcomes:

• every student has challenging (stretch) goals
• time for teacher inquiry and evaluative work is protected
• teachers have sufficient time for collaborative work
• teaching time is protected from unnecessary interruptions
• teachers have sufficient time to discuss student progress and plan teaching together
• teachers have a shared understanding of the process of inquiry

- we have used inquiry to make worthwhile changes in our teaching and student learning
- curriculum in each learning area draws on and adds to content relevant to the identities of Māori learners
- we actively seek the expertise of the local community, hapū, and iwi.

5. Collaborative practices

Collaborative practice within schools has been increasingly emphasised as an effective way to improve teaching and learning, and provide teachers and principals with supportive work environments. The Kāhui Ako policy is predicated on the effectiveness of cross-school collaborative work for the same ends. In this section we look first at collaborative practice within schools, and then at the early experiences of gains from working collaboratively across schools.

Collaborative practices within schools

To see whether there is growth in collaborative practices within schools, the Ministry of Education asked us to identify a set of items that could be tracked over time. Quite a few of the items in the School Practices part of the TSP imply that teachers are working together, but the items we selected are particularly pertinent to how teachers work together to enable student progress, and how teachers can mutually strengthen practice.

Analysis of a set of items in the trial showed that they formed a robust scale (Cronbach's alpha of 0.88), with correlations ranging from 0.63 to 0.80 between individual items and the scale as a whole.[10] Figure 29 below shows the items, and how teachers and principals responded to them.

Overall, most teachers are in schools where there is collaborative practice, but fewer than half say that these practices are 'very like our school'.

The most common collaborative practice in schools is the regular discussion of student progress and strategies to improve progress of students of concern within teaching teams. Just over a third of the teachers are in schools which have a definite ('very like our school') shared and clear understanding of how their work with students relates to teaching before and after the student year level as well. Just over a quarter of teachers think they definitely get meaningful feedback from colleagues, or that there is systematic guidance of teachers new to the school into the practices that the school's teachers have found effective with their students. Around a fifth think that their school provides sufficient time for collaboration.

Principals' views are similar to teachers' on three of the seven items in the scale, but they are much more positive about the sufficiency of time for collaborative work, and that teaching teams discuss student progress and strategies to improve it. They are less positive that teachers have a clear picture of curriculum for adjacent year levels as well as their own.

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[10] To form the scale, we used responses from only those who answered at least six of the seven items that made it up.

Figure 29 **Collaborative school practices**
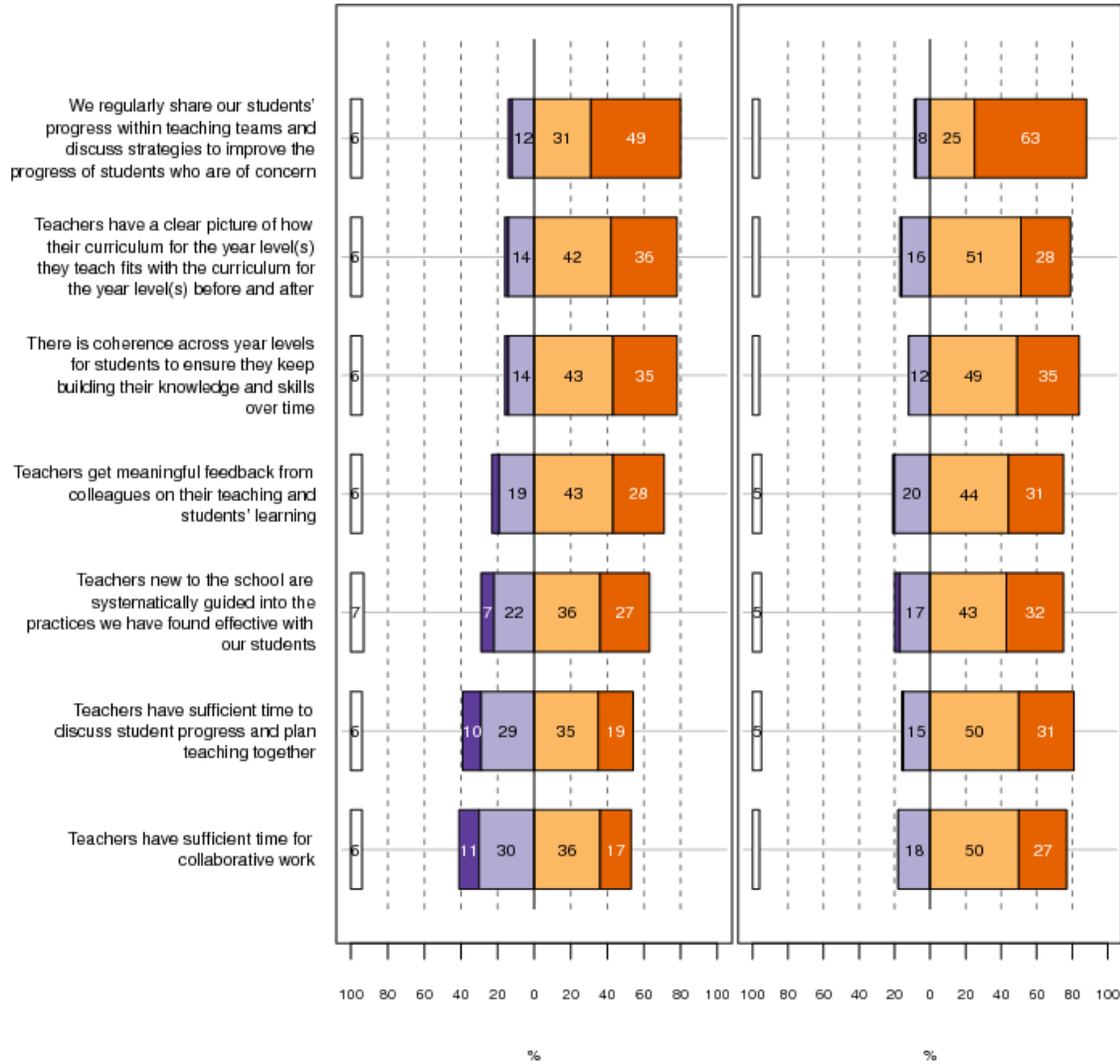
Figure 30 shows how much the proportion of teachers in each school taking part in the TSP in 2017 reporting that a practice is 'very like our school' differs across schools. The range is wide. The least variability is in the two items related to having sufficient time for collective work, indicating that schools generally are challenged to match the turn to greater collective work with current staffing resources and how timetables are organised.

Figure 30 **Collaborative school practices—by school (*n* = 311 schools)**

Proportion of teachers in school saying very like our school (%)
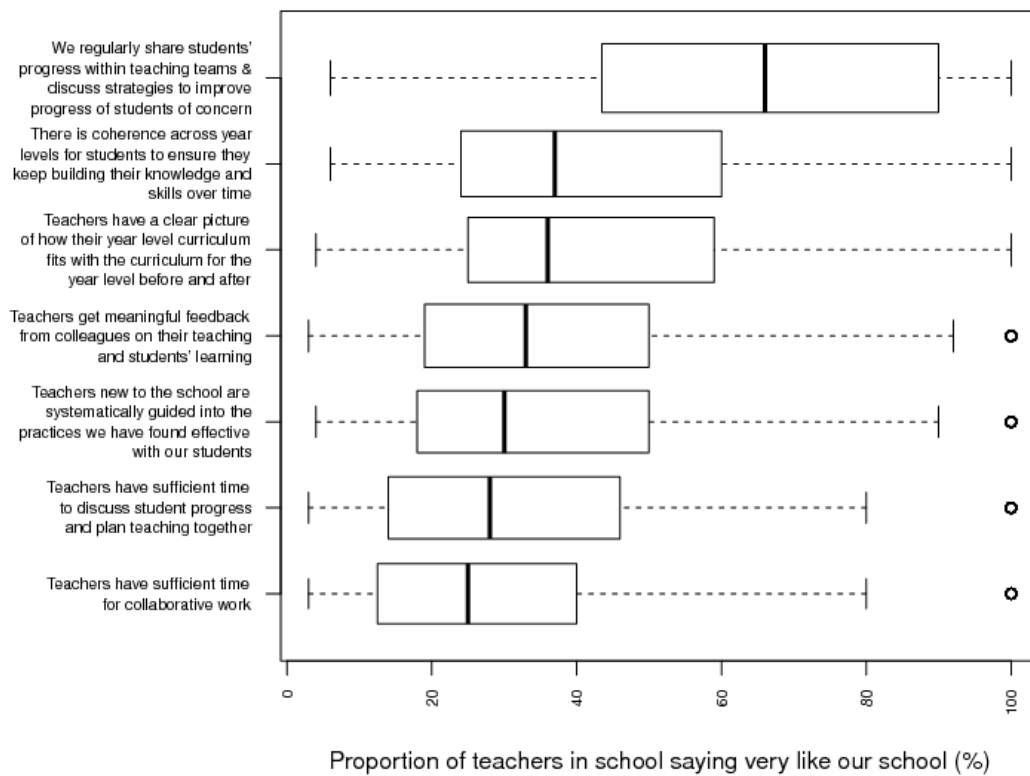
In-school collaborative practices showed similar patterns whether or not a school was a Kāhui Ako member. However, all teachers from Kāhui Ako schools answered at least six of the seven items, compared with 22% of the teachers from schools not in a Kāhui Ako.

Early experiences of Kāhui Ako

Seventy percent of the teachers and 74% of the principals came from schools that were members of a Kāhui Ako, a little higher than the 64% of schools nationally that belonged to one in Term 3 2017. This reflects communication with Kāhui Ako leaders and Expert Partners working with them about the TSP, and the offer of an aggregate Kāhui Ako report. Ten Kāhui Ako received an aggregate report.

Teacher reports about teaching practices, teacher and principal reports about school practices, and the principal's leadership were unrelated to whether or not their school belonged to a Kāhui Ako.

We asked teachers and principals what they were gaining from their school's Kāhui Ako membership. Figure 31 shows that a third or more of the teachers saw some gains at this early stage of Kāhui Ako activity, slightly more around opportunities to collaborate than around their capacity for inquiry and strengthening of teaching practice.

Figure 31 **Teacher reports of gains from Kāhui Ako participation (*n* = 3,034)**
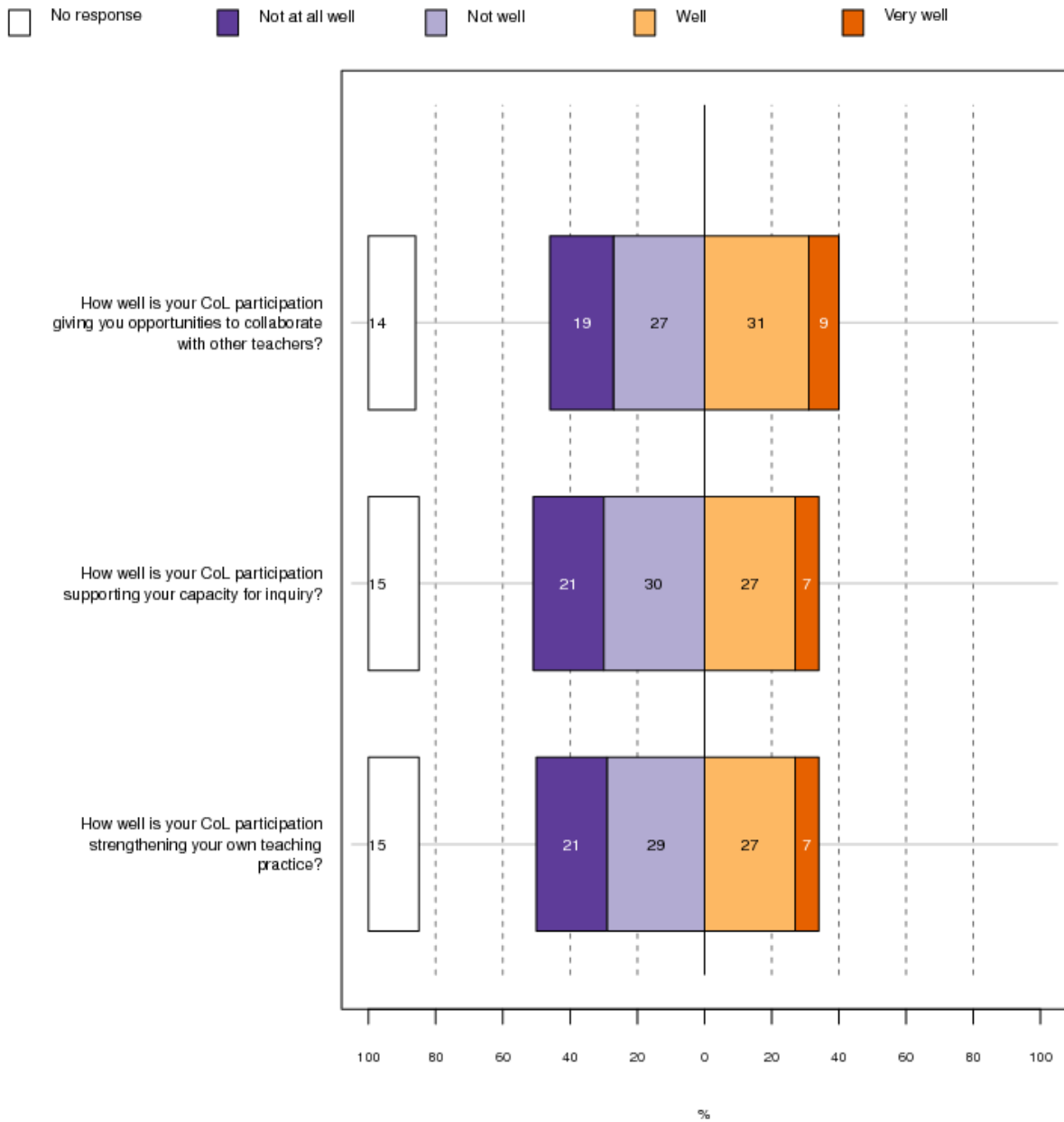
Gains from Kāhui Ako participation were higher for teachers who had taken on the Kāhui Ako teaching roles, as Table 10 shows. The across-school roles, with more time allocated for the role, showed the most gains. Interestingly, teachers in the across-school Kāhui Ako roles have higher morale levels than other teachers (40% strongly agreed that their morale level was good, compared with 19% overall). Kāhui Ako teaching roles' views of the sustainability and fairness of their workloads were similar to other teachers' views about their own workloads.

Table 10   **Kāhui Ako teaching roles gains from Kāhui Ako participation**

Gain	Within-school Kāhui Ako teacher (*n* = 154) %	Across-school Kāhui Ako teacher (*n* = 46) %
Collaboration opportunities with other teachers		
Very well	23	63
Well	49	15
Strengthening own practice		
Very well	21	54
Well	51	30
Capacity for inquiry		
Very well	29	63
Well	45	24

Principals reported more gains from Kāhui Ako participation than teachers other than the Kāhui Ako across-school roles, with 58% seeing some gains in their own professional support, and close to half reporting gains for their school's capacity for inquiry, and teacher capability, as shown in Figure 32.

Figure 32 **Principal reports of gains from Kāhui Ako participation (*n* = 262)**
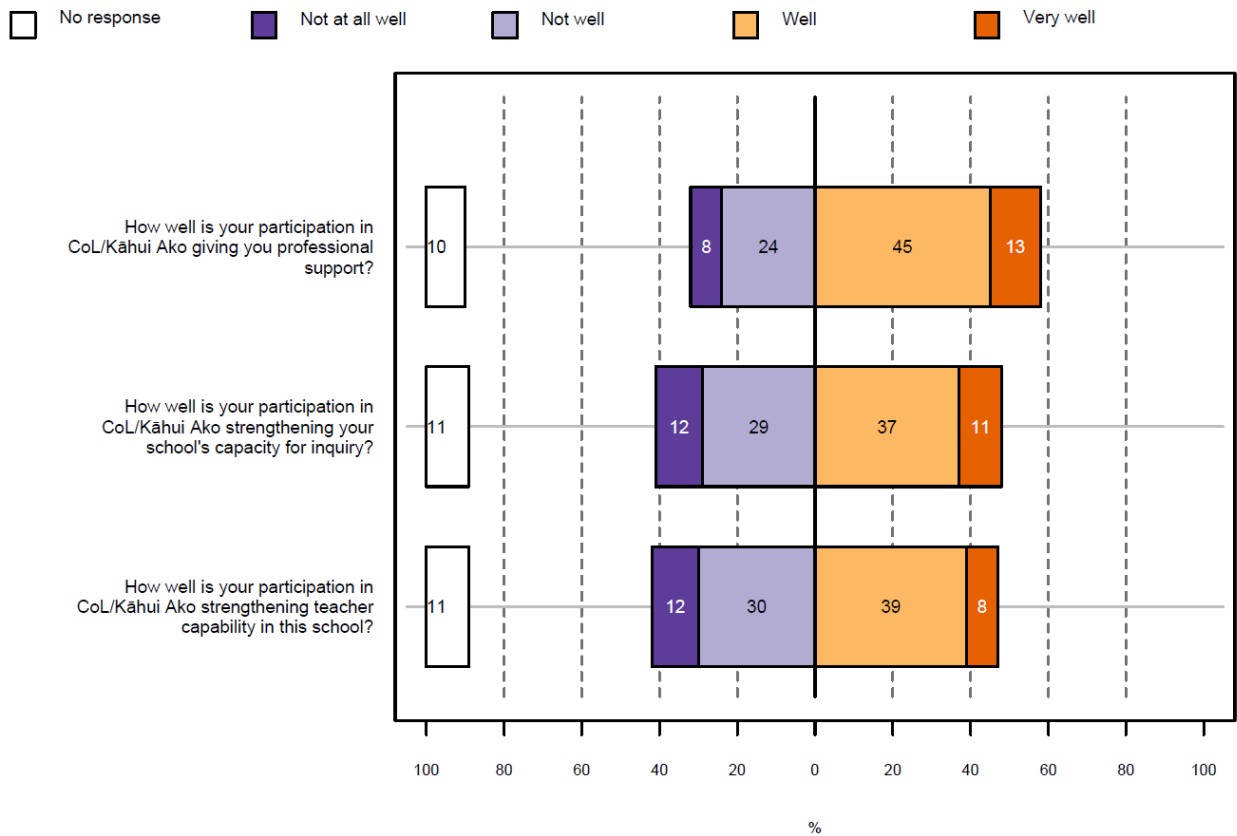
Views of the gains from Kāhui Ako participation were unrelated to school type or school decile.

Principals who were Kāhui Ako leaders did not report more gains for their own professional support than other principals in Kāhui Ako, but they did report more gains for their school:

- 79% of Kāhui Ako leaders who were principals reported that their Kāhui Ako participation has strengthened teacher capability in their school, compared with 43% of other principals whose school belonged to a Kāhui Ako
- 76% of Kāhui Ako leaders who were principals reported that their Kāhui Ako participation has strengthened their school's capacity for inquiry, compared with 45% of other principals whose school belonged to a Kāhui Ako.

Relation with in-school collaborative practices

We were interested to see whether teachers' views of their own school's collaborative practices (including the time available for it) were related to what they were getting from their school's collaboration work with other schools through Kāhui Ako. Figures 33 to 35 show that there was a clear relationship in line with the expectation that one kind of collaboration would support the other.

Figure 33 **Teacher reports of collaborative school practice in relation to Kāhui Ako collaborative opportunities**

How well is your Kāhui Ako participation giving you opportunities to collaborate with other teachers?
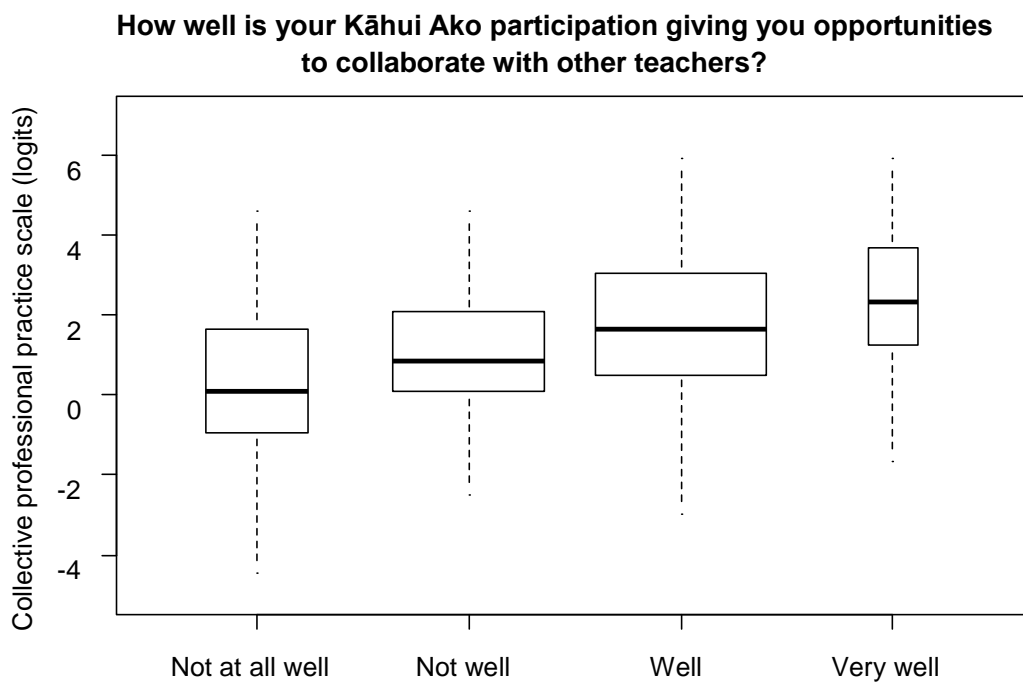
Figure 34 **Teacher reports of collaborative school practice in relation to strengthening teaching practice through Kāhui Ako participation**

How well is your Kāhui Ako participation strengthening your own teaching practice?
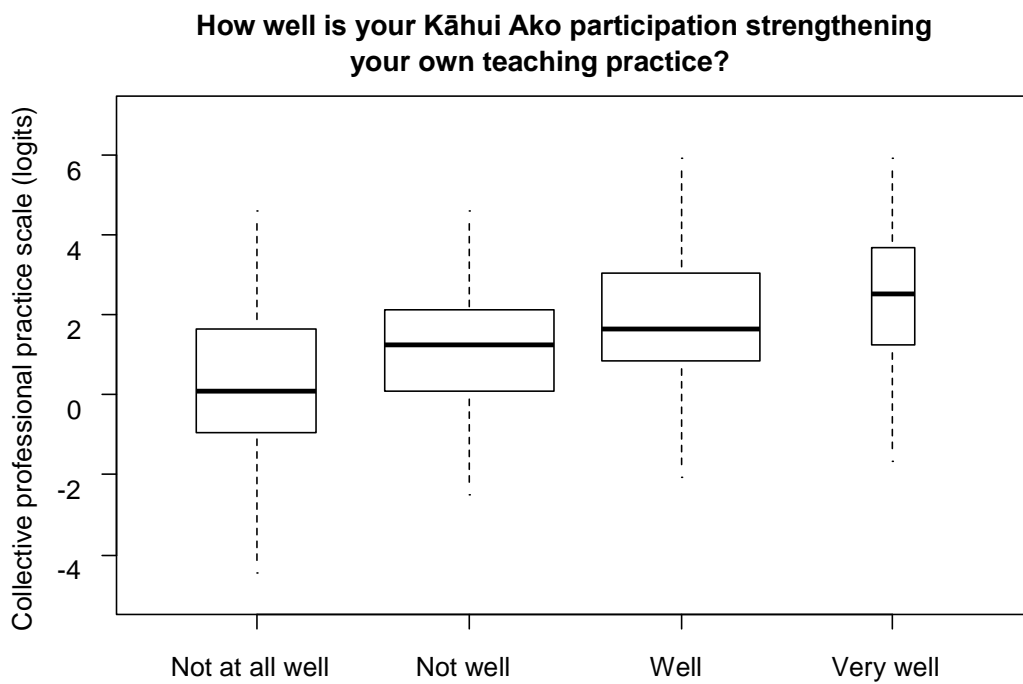
Figure 35 **Teacher reports of collaborative school practice in relation to strengthening capacity for inquiry through Kāhui Ako participation**
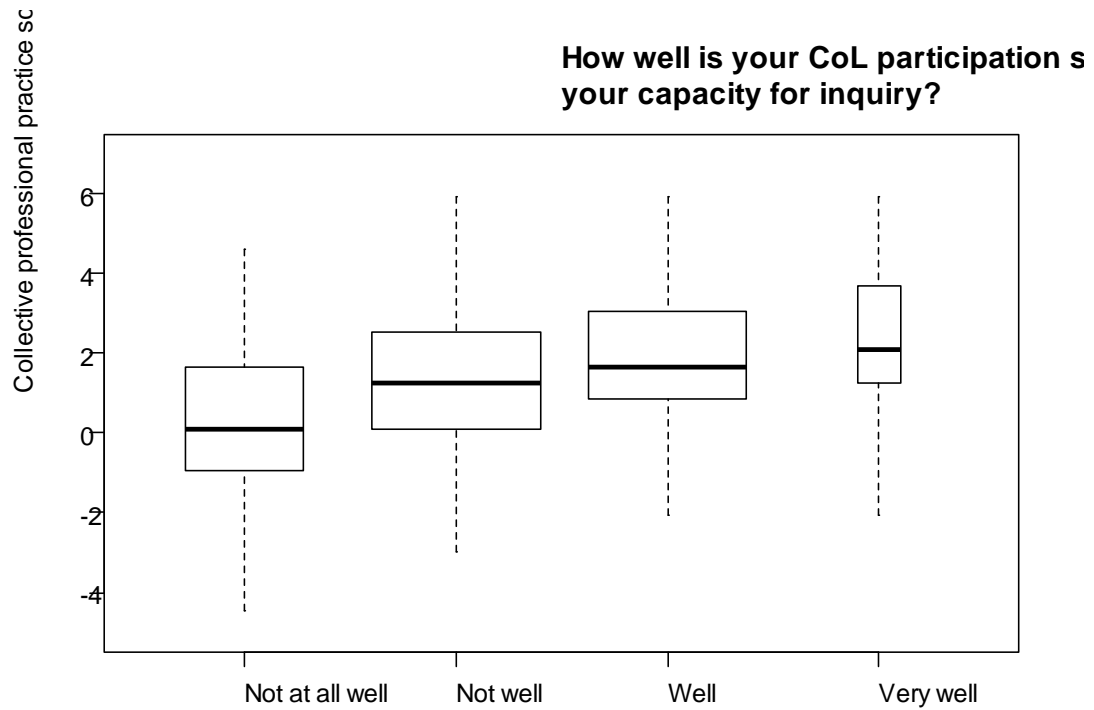
6. School practices for Māori learners

Improving educational provision for Māori students has been a growing focus in policy and the sector in recent years. The 2016 NZCER national survey of primary and intermediate schools shows encouraging signs that schools are working on incorporating practices that should be supportive of Māori learners (Bright & Wylie, 2017).

Here we bring together the five items from different domains in the School Practices section that specifically relate to Māori learners and cultural responsiveness.

Having clear school-wide goals for the academic achievement of Māori students is the practice most likely to be reported as 'very like our school', by 43% of teachers. Around a third of teachers also see that it is 'very like our school' for teachers to teach in ways that promote Māori students' belonging in the school, and for students to experience culturally responsive pedagogy. Least likely to be seen as 'very like our school' is curriculum that draws on and adds to content relevant to the identities of Māori students, and active seeking of expertise of local community, hapū, and iwi. These items point to challenges of existing knowledge, and to building and maintaining relationships beyond the school.

Figure 36 shows that teacher and principal reports are similar here.

Figure 36 **School practices for Māori learners**
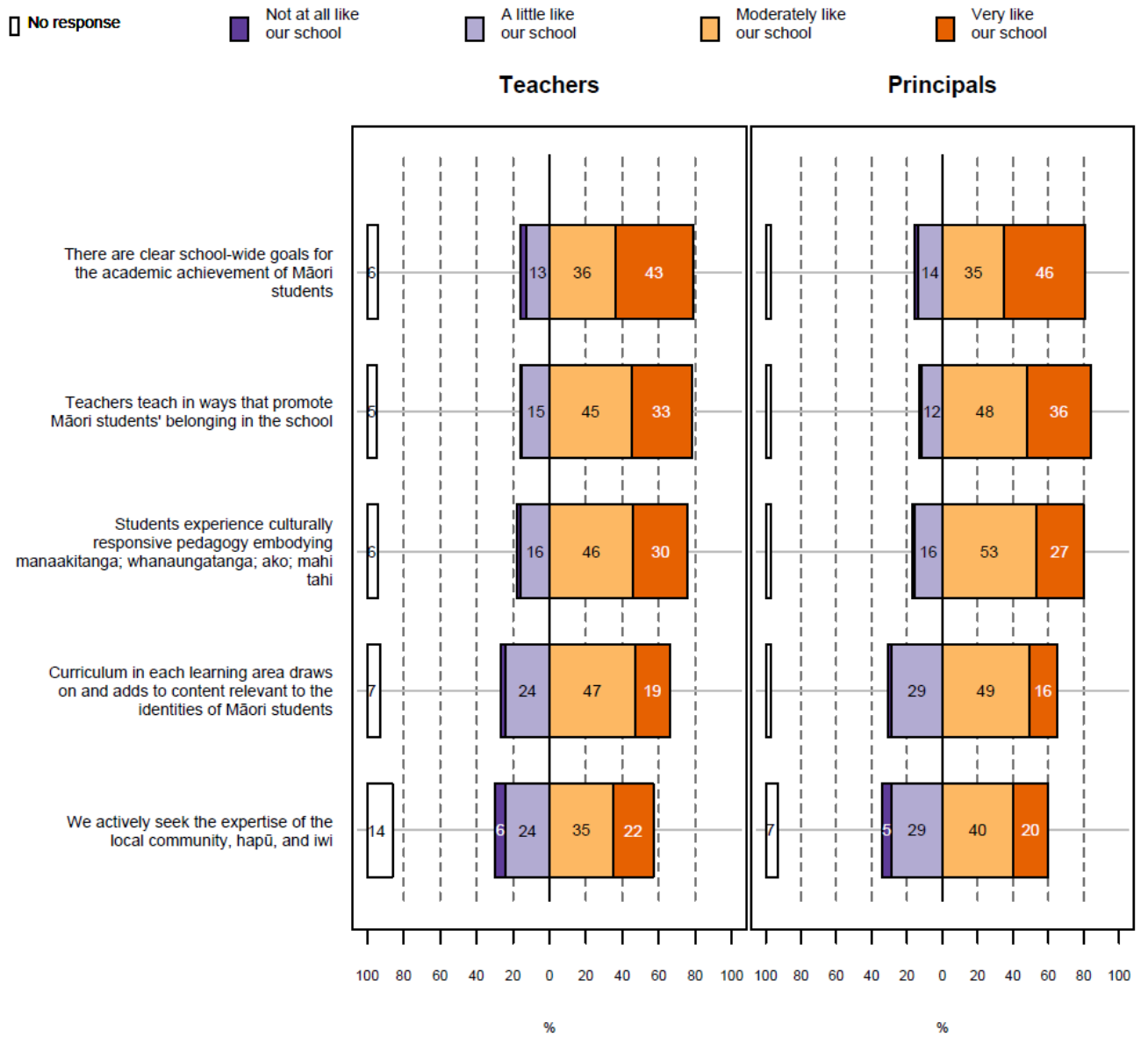
Figure 37 shows how the proportion of teachers in each school taking part in the TSP in 2017 reporting that a practice is 'very like our school' differs across schools. The range is wide. The least variability is related to curriculum that draws on and adds to content relevant to the identities of Māori students, and active seeking of expertise of local community, hapū, and iwi.

Figure 37 **School practices for Māori learners—by school**

Proportion of teachers in school saying very like our school (%)
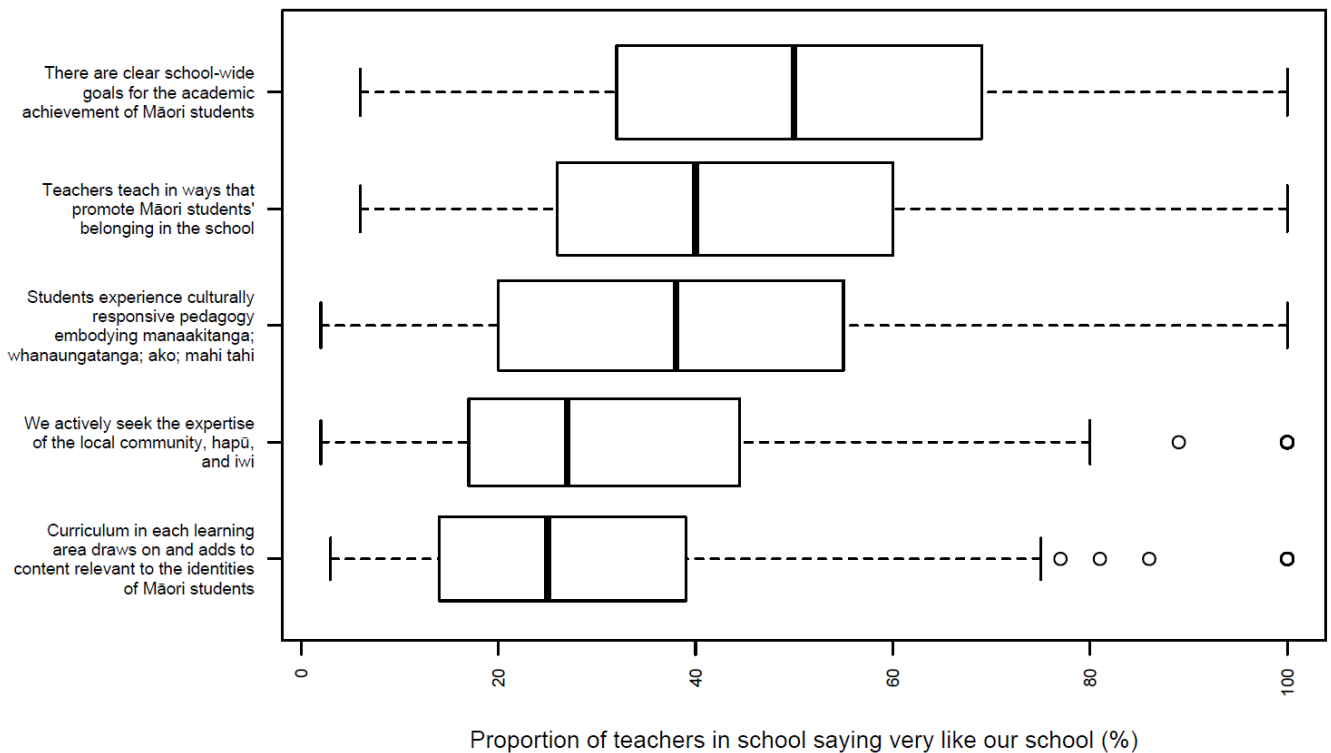
School Practices for Māori Learners scale

We were interested to see whether these five items formed a scale, and to see then whether there were patterns related to the proportion of Māori students in a school. We have found some differences in provision for Māori students, including opportunities to learn and use te reo Māori most likely to occur in schools with high Māori enrolment (more than 30% of students) in the NZCER national surveys (Bright & Wylie, 2017).

The items do form a scale, with a Cronbach's alpha of 0.88, and person reliability of 0.75, which is good for a scale with five items. The scale was formed using only teachers who answered four or five of the items; whether teachers answered fewer questions was unrelated to the proportion of Māori students in their school, so there was no bias in the picture we have.

Figure 38 shows that teacher responses here are not related to the proportion of Māori students in the school. There are fewer low 'scores' on the scale for teachers from high Māori enrolment schools. This suggests that improving school practices for Māori learners is a challenge across the board.

Figure 38 **School Practices for Māori Learners scale, by school proportion of Māori students**
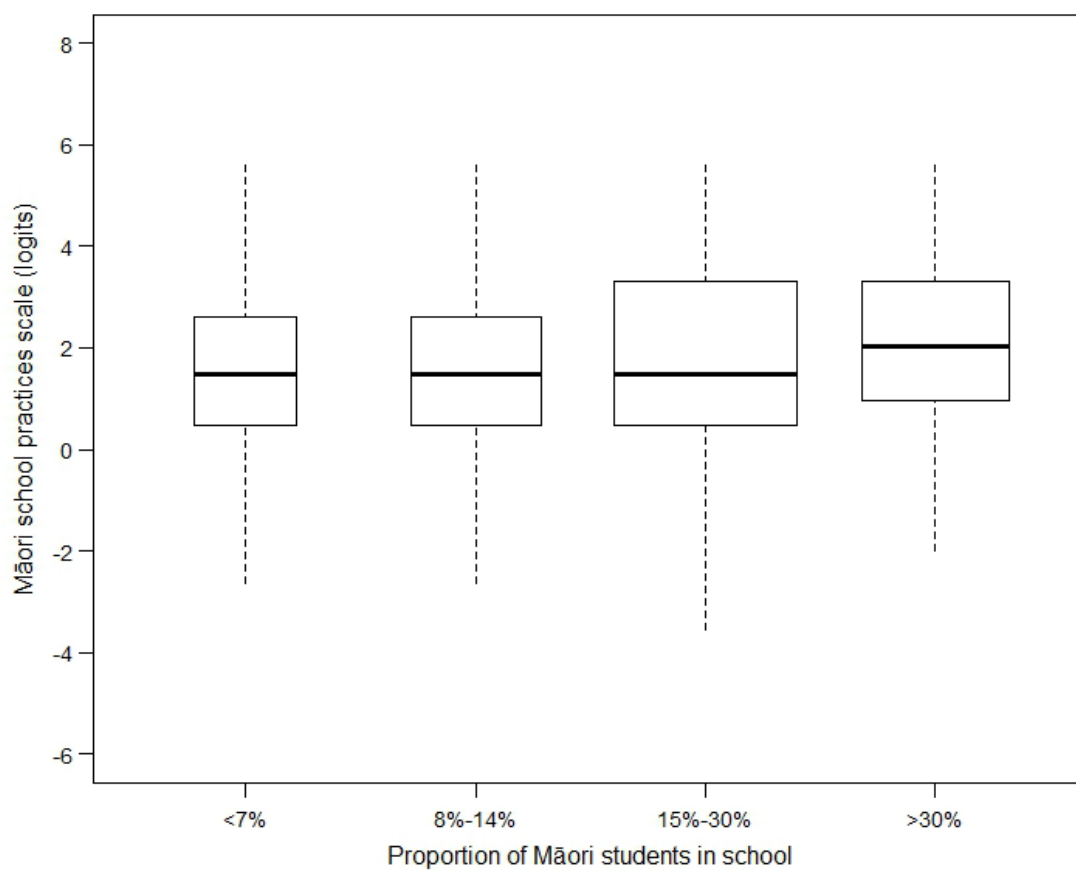
7.   Principal leadership / He aratakinga tumuaki

We asked teachers and principals about 19 different facets of principal leadership that have been identified as linked to student outcomes and positive school environments. These facets were drawn from the Educational Leadership Practices survey, based on the Best Evidence Synthesis on Leadership and Student Outcomes (Robinson, Hohepa, & Lloyd, 2009), and from more recent research that further emphasises the principal's role in developing collective leadership, the capacity for organisational learning (Louis & Lee, 2016), and providing 'caring leadership' (Smylie, Murphy, & Louis, 2016), 'walking the talk' with strong moral values that include continual improvement of practice (Notman & Youngs, 2016), and commitment to meeting each student's needs (Galloway & Ishimaru, 2015).

These key facets of leadership are amplified and sharpened in the recent iterative research and development that has shown the value of culturally responsive pedagogy for Māori learners— and others—and the pivotal role of the principal in changing practice and ensuring change is sustained. Effective principals are also critical "transformative" leaders (Berryman & Lawrence, 2017, pp. 343–345).

Galloway and Ishimaru (2015, p. 16) describe three key levers for equity-oriented leadership that also resonate in New Zealand:

- An Equity-oriented frame based on an "overall vision of excellence for every student" , not one based on deficit thinking, or thinking that treating all students alike is fairness
- Democratic, constructed leadership: "A shift from 'entity' conceptions of leadership (embodied in formal positions or particular individuals) to a relational 'constructionist' perspective on leadership, where the work of leadership is a process of social construction mediated through practices, meanings, and interactions among people over time."
- Inquiry-embedded leadership.

 A factor analysis of the 19 items showed that they fell into two groups, with high internal consistency (Cronbach's alpha of 0.90) for both teacher and principal responses.

The first factor focused on interpersonal relations and 'human organisation' and was formed by 12 items. The second factor focused more on providing direction, including a focus on one of today's key educational challenges: cultural engagement and the principles of the Treaty of Waitangi, as a foundational document for teaching and learning. The seven items in this factor also included ones that encourage fresh horizons.

Interpersonal relations

Teacher and principal views

Teachers generally rate their principals highly on their interpersonal relations (Figure 39). They rate their principals highest on their care for students, modelling school values, and maintaining their integrity in difficult situations. The item that stands out in this set is consult staff appropriately before making most important decisions, with only 29% of teachers seeing their principal doing this 'very well'. Perhaps principals and teachers have different understandings of what appropriate consultation is.

Around a fifth of teachers also see their principal only 'somewhat well' or 'not well' creating the conditions for staff to be motivated to do their best for improved student learning, making fair and equitable decisions, identifying and resolving conflict quickly and fairly, and developing others' leadership capability. These are aspects of leadership that touch on transparency and also on the allocation of attention and other resources.

Principals are somewhat more positive than teachers about their interpersonal relations, and how they work with others and conduct themselves when things need attention. This is most evident in relation to modelling the school values, caring for students, and working with others to solve problems. However, principals and teachers have similar views about how well the principal creates the conditions for staff to be motivated to do their best for improved student learning, and develops others' leadership capability.

Figure 39 **Principal leadership—interpersonal relations and working with others**
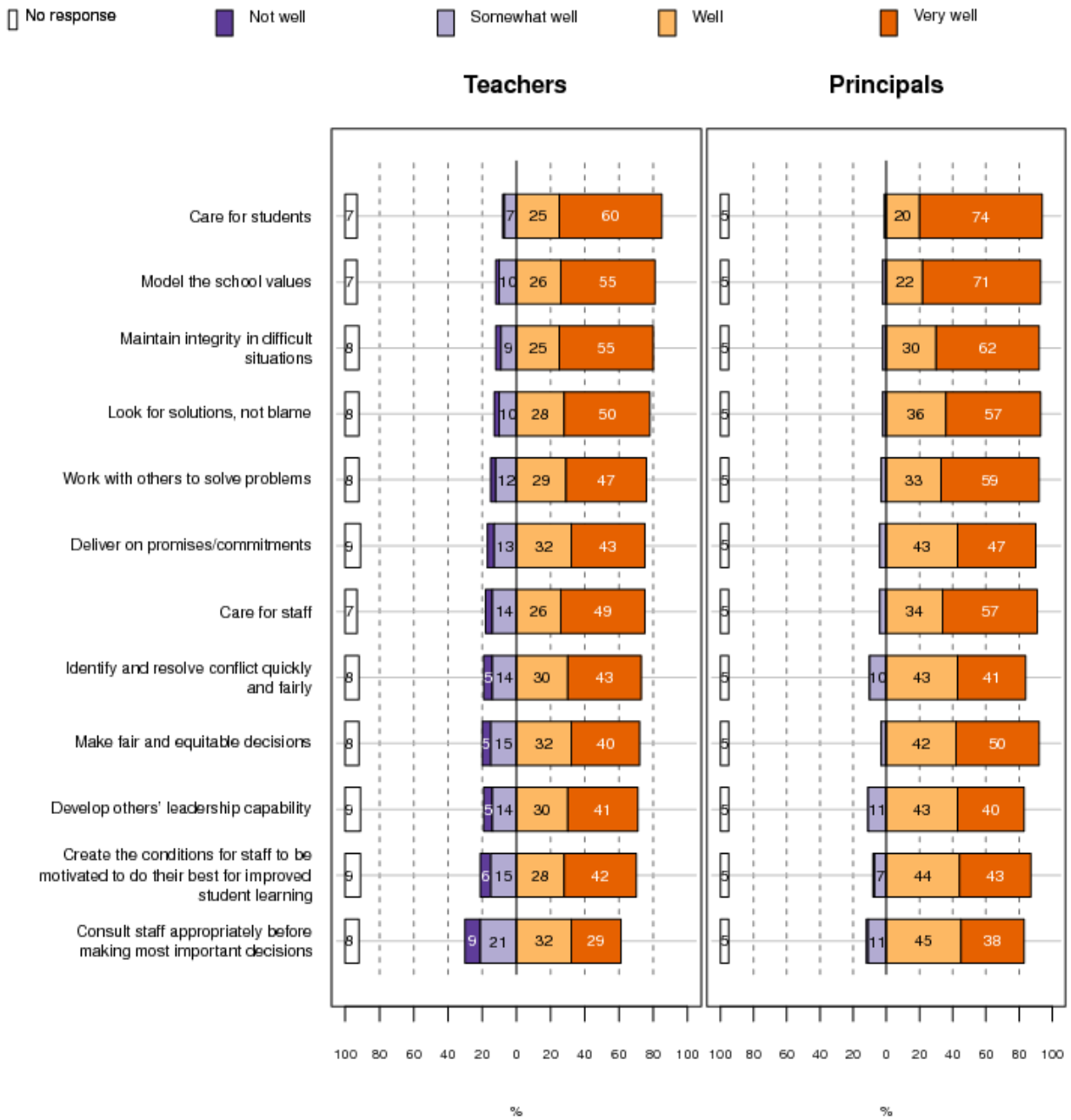
Figure 40 shows the proportion of teachers in each school taking part in the TSP in 2017 reporting that an aspect of their principal's work is done 'very well'.[11] There is quite a lot of variability across schools. This is most evident in relation to the items identify and resolve conflict quickly and fairly, make fair and equitable decisions, and consult staff appropriately before making most important decisions, with less variation for the item model the school values.

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[11] This analysis is based on teachers' responses for 336 schools, excluding schools that appeared to have less than half their teaching staff responding to the TSP, based on a rough calculation of teacher numbers at each school, using teacher:student ratios, and any schools where teachers did not answer questions on the principal's leadership.

Figure 40 **Principal leadership—interpersonal relationships; the school view**

Proportion of teachers in school saying very well (%)
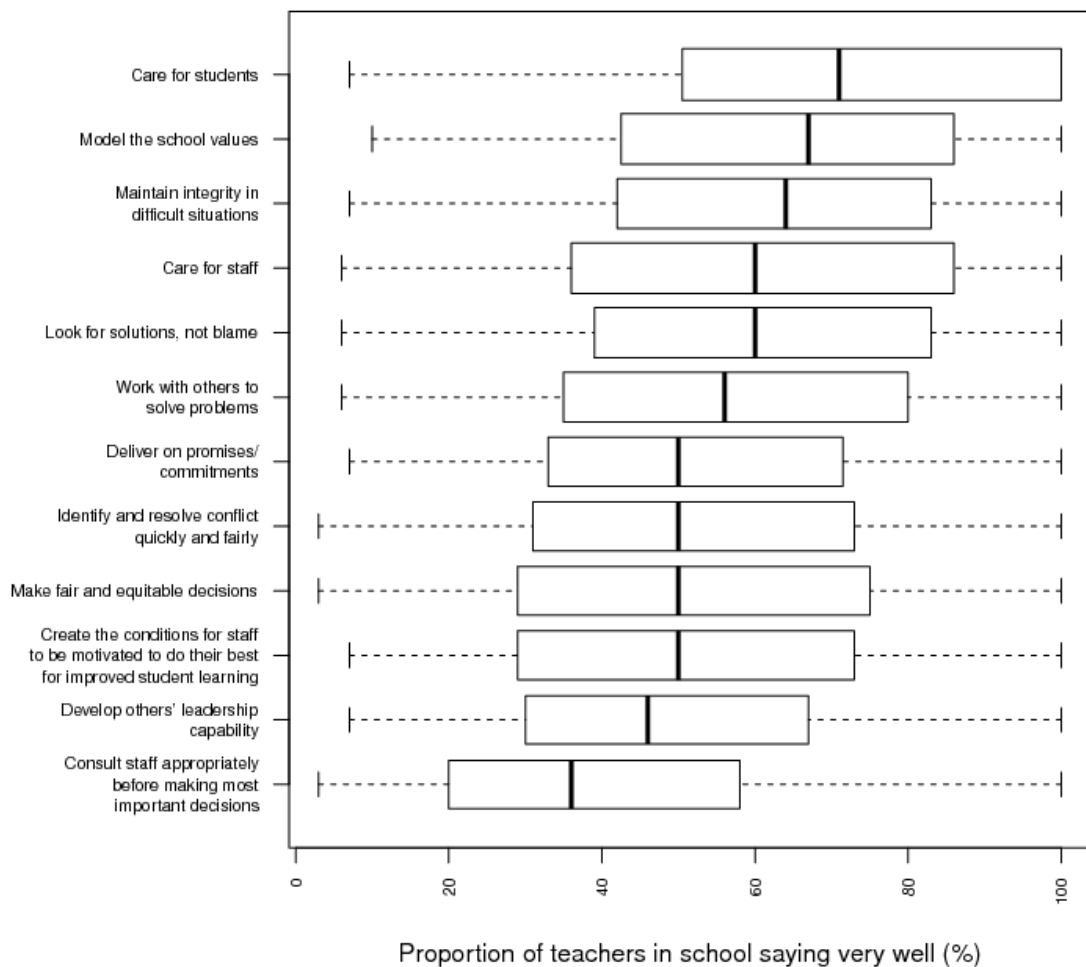
Direction and fresh horizons

Teacher and principal views

Figure 41 shows that teachers' ratings of their principal's role in providing direction as well as fresh horizons are somewhat lower than they are for their ratings of their interpersonal relationships. They rate their principal highest in their commitment to continual improvement, followed by their sharing a clear and compelling direction for the school.

Unlike the other aspects of Principal Leadership, or the School Practices domains, it is teachers who are the more positive here in terms of rating something 'very well'. Apart from one item, showing commitment to continual improvement, principals seem to be measuring themselves against a more demanding standard than teachers when it comes to the interface between the school and a horizon of possibility and change.

Figure 41 **Principal leadership—direction and fresh horizons**
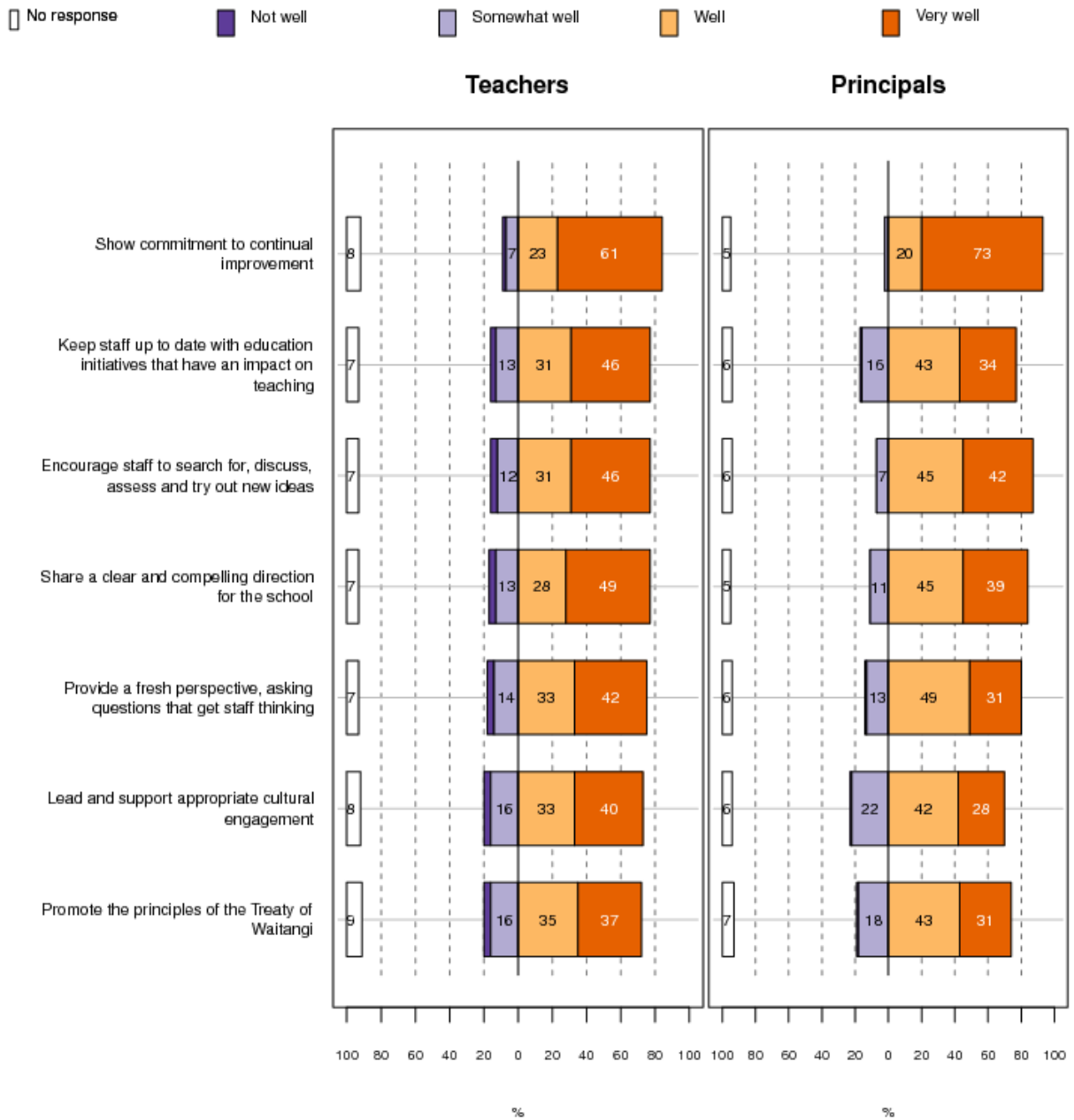
School views

Figure 42 shows that the proportion of teachers in a school who see their principal acting 'very well' to provide direction and fresh horizons varies widely across schools, with slightly less variability in relation to showing commitment to continual improvement, and promoting the principles of the Treaty of Waitangi.

Figure 42 **Principal leadership—direction and fresh horizons—school view**

Proportion of teachers in school saying very well (%)
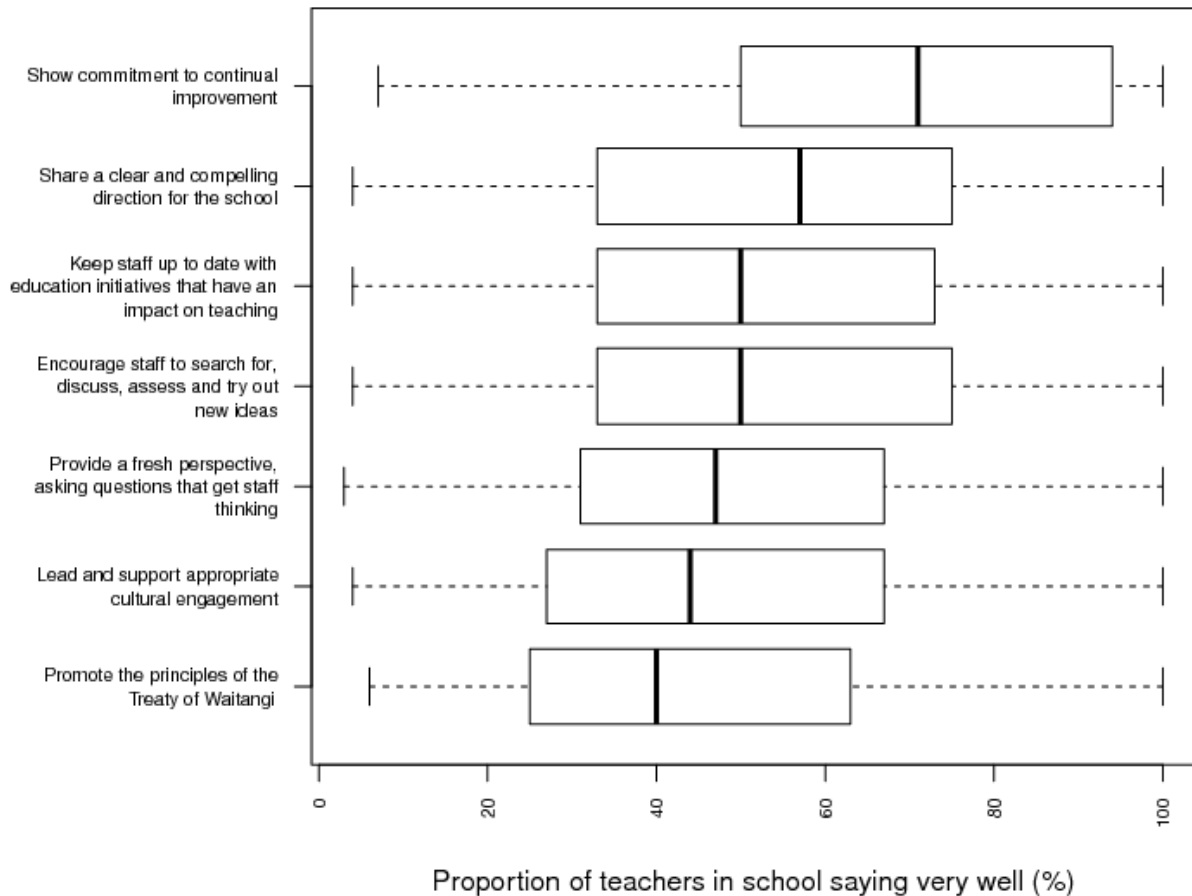
Differences in school type and decile

Teacher views

Generally fewer secondary and intermediate school teachers than teachers in primary, area, or special schools thought of their principal's practices as being done 'very well', and more thought they were done 'somewhat well', or 'not well'.

There were no differences in teacher views of their principal's leadership related to the school decile.

Principal views

Numbers allowed us to compare the views of principals from contributing and full primary schools, and secondary schools, but not intermediates (*n* = 13), area schools (*n* = 8), or special schools (*n* = 4).

Principals' views of their own practice were largely unrelated to school type. Full primary school principals were most likely to see that their creating the conditions for staff to be motivated to do their best for improved student learning was done 'very well' (52%, compared with 37% of contributing primary and 32% of secondary principals).

There were no differences in principal views of their leadership related to the school decile.

Differences related to team-teaching

Only four of the 19 items in the principal leadership survey show some differences (10–13 percentage points) between teachers who always team-teach, and those who don't: in teachers seeing their principal doing 'very well'. These items suggest an innovative bent:

• provide a fresh perspective, asking questions that get staff thinking
• encourage staff to search for, discuss, assess, and try out new ideas
• create the conditions for staff to be motivated to do their best for improved student learning
• keep staff up to date with education initiatives that have an impact on teaching.

Differences related to principal workload

We were interested to see if principal reports of the sustainability of their workload and their ability to schedule enough time for the educational leadership part of their role were related to their perceptions of how well they were leading their school. There were patterns for quite a few items suggesting that views of sustainability of workload were related to principal views of their leadership, reaching statistical significance[12] in just two aspects:

• look for solutions, not blame
• work with others to solve problems.

Similarly, there were indications that principals who strongly agreed that they could schedule enough time for educational leadership saw their leadership more positively than those who strongly disagreed that they could. A pattern showing that the more a principal agreed that they could schedule enough time for educational leadership the more they thought they could lead very well reached statistical significance for four of the Principal Leadership items:

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[12] This may be because the test of statistical significance looks at expected distributions across responses, and becomes less robust when cell counts are less than five. In this case, we had few principals saying that they did something somewhat well, or not well.

- share a clear and compelling direction for the school
- provide a fresh perspective, asking questions that get staff thinking
- encourage staff to search for, discuss, assess, and try new ideas
- keep staff up to date with education initiatives that have an impact on teaching.

Discussion

Generally, teachers are positive about the way their principal leads the school. They are somewhat more positive about their principal's interpersonal relationships and how they work with others than their provision of direction and support for fresh horizons. Principals are more positive than teachers about the level of their interpersonal relationships, but more self-critical when it comes to the interface between the school and a horizon of possibility and change. There are indications that this is related to being able to schedule enough time for educational leadership (and that educational leadership is seen by principals as being as much about this interface and the relationships, interaction, and enactment of values within the school). It is not so related to school characteristics. It is also interesting to see that it is items connected with this interface that are more likely to be rated highly by teachers who team-teach all of the time, indicating a link between an innovation that focuses more on collective working and principal focus on the interface between schools and wider possibilities and knowledge.

8.   The three scales

We constructed scales using teacher survey responses where teachers had answered at least half the questions. The 'fit' statistics for each scale were checked, including the correlations between domains and the scale as a whole, and whether there was a good spread of answers across the response categories (e.g., in the teaching practices scale 'not well', 'somewhat well', 'well', and 'very well'). We also checked whether the item responses from different groups showed different response patterns, which might indicate that teachers in different groups understood the items differently. We did find a few items where the patterns were different for new teachers (0–2 years' teaching experience), and between primary teachers and secondary teachers. These differences were not large enough to distort the scales, so all the items remained in the scales.

We describe each of the three scales and the correlations then show the distribution of teacher scores on the scale by four school types: primary (including intermediate), secondary, composite (area), and special. Then we show the variation within schools of teacher responses, by school type for primary (including intermediate) and secondary (including area schools). This variation is particularly important for schools' formative use of their TSP results. At the national level, if these practices are systemically supported, one might be looking over time for gradually increasing median scale scores coupled with decreased variability between schools.

This section ends with a look at how the three scales are correlated.

Teaching Practices scale

This scale is made up of the 29 items from the five domains asked about in the Teaching Practices section of the TSP. It had a Cronbach's alpha of 0.95, and a person reliability coefficient of 0.92. It uses the responses of 2,748 primary teachers, 1,392 secondary teachers, 120 area and composite school teachers, and 94 special school teachers.

Table 11 shows the correlations between the five domains that make up this scale, and with the Teaching Practices scale as a whole. The *Being professional* domain had the lowest correlation with the scale as a whole. The correlations with other domains are highest for the *Optimising student opportunities to learn* domain, and lowest for the *Learning-focused partnerships* domain.

Table 11 **Correlations between person scores on Teaching Practices scale and its domains**

	Teaching Practices	Optimising students' opportunity to learn	Diversity, equity, and inclusion	Learning-focused partnerships	Teaching as inquiry	Being professional
	All items	**8 items**	**6 items**	**4 items**	**4 items**	**7 items**
Teaching Practices	1.00	0.86	0.82	0.72	0.80	0.60
Optimising students' opportunity to learn		1.00	0.65	0.51	0.65	0.60
Diversity, equity, and inclusion			1.00	0.52	0.56	0.57
Learning-focused partnerships				1.00	0.46	0.45
Teaching as inquiry					1.00	0.66
Being professional						1.00

Distribution of scores on the Teaching Practices scale

Figure 43 shows no substantive differences in median scores between teachers from different school types.

Figure 43 **Distribution of scores on the Teaching Practices scale by school type**
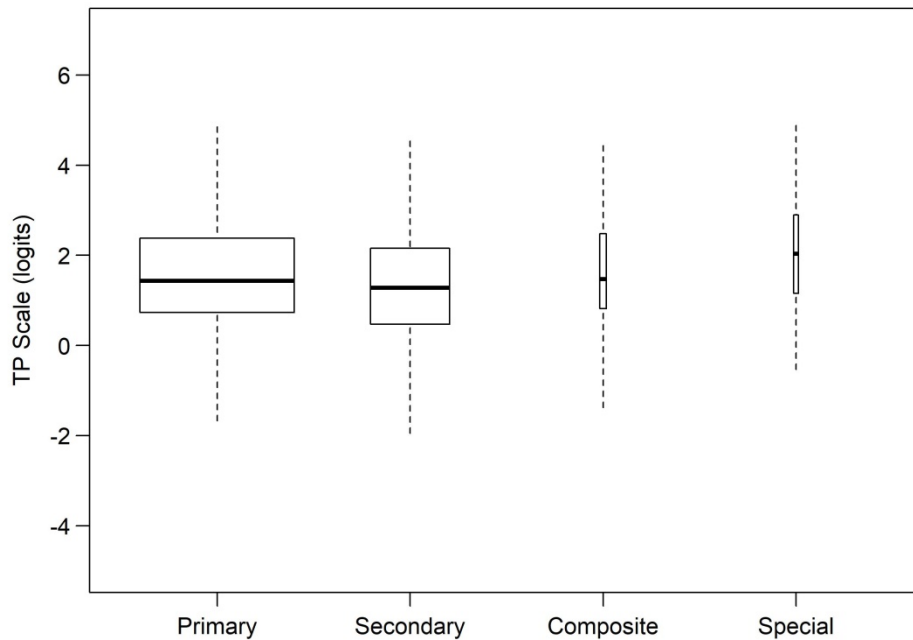
We found no statistical relationship between a teacher's overall scale score on the Teaching Practices scale and their years of experience, whether they team-taught or not, or their morale and views of the sustainability and fairness of their workload.

The mean *school* scores of teachers are more consistent for secondary schools than for primary schools. In the two figures below, the red line segments show the standard errors of the mean scale score for each school taking part in the TSP in 2017. Standard errors are smaller for secondary schools because they have more teachers. The black line segments show the range of teachers' scale scores in each school.

Both Figures 44 and 45 show the variation in Teacher Practices' scale scores within individual schools, with more variation evident in primary than secondary.

Figure 44 **Distribution of Teaching Practices scores—primary schools' range**
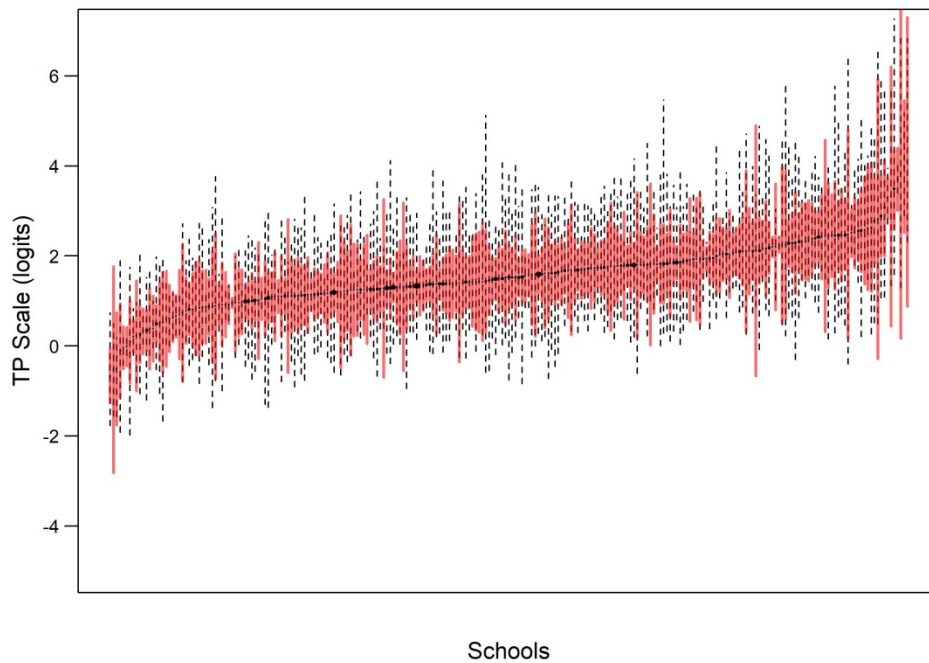
Figure 45 **Distribution of Teaching Practices scores—secondary schools' range**
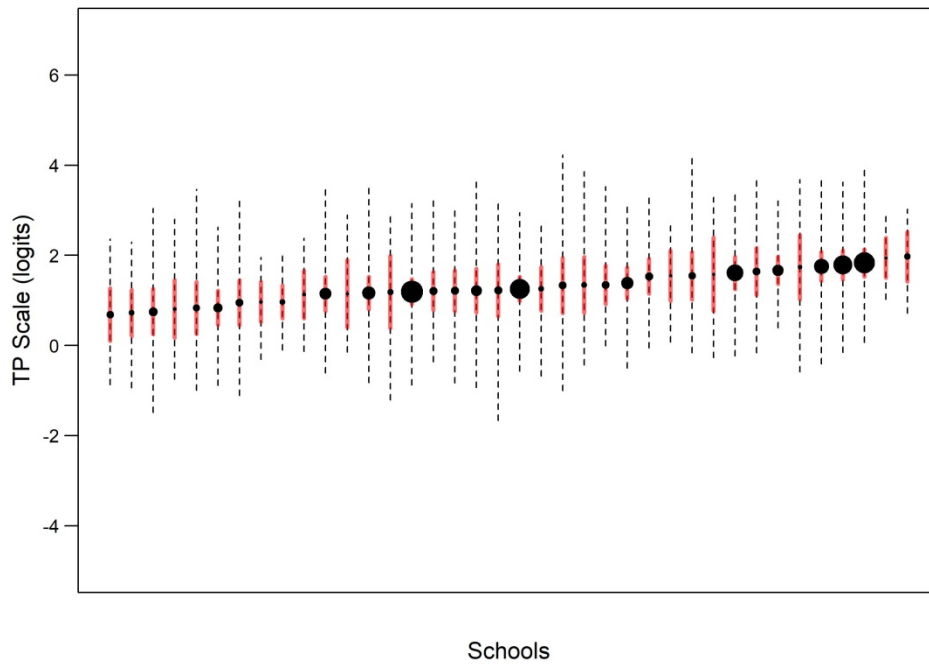
School Practices scale

This scale is made up of the 53 items asked about in the School Practices section of the TSP. It had a Cronbach's alpha of 0.98 and a person reliability coefficient of 0.95. It uses the responses of 2,631 primary teachers, 1,308 secondary teachers, 113 area and composite school teachers, and 90 special school teachers.

Table 12 shows the correlations between the six domains that make up this scale, and with the School Practices scale as a whole. The correlations are stronger for the domains within this scale than for the Teaching Practices scale. The correlations are highest for the *Developing professional practice domain*, and lower for the *Learning-focused partnerships* and *Strategic resource allocation* domains.

Table 12 **Correlations between person scores on overall School Practices scale and domains**

	School Practices	School goals	Supportive and caring environ-ment	Coherent curriculum and evaluation	Learning-focused partner-ships	Strategic resource allocation	Developing professional practice
	All items	9 items	9 items	9 items	5 items	5 items	16 items
School Practices	1.00	0.86	0.87	0.87	0.78	0.82	0.94
School goals		1.00	0.74	0.74	0.66	0.64	0.74
Supportive and caring environment			1.00	0.75	0.66	0.64	0.77
Coherent curriculum and evaluation				1.00	0.70	0.64	0.76
Learning-focused partnerships					1.00	0.57	0.68
Strategic resource allocation						1.00	0.77
Developing professional practice[13]							1.00

Distribution of scores on the School Practices scale

Figure 46 shows that secondary teachers' median scores are somewhat lower than teachers from other school types. Primary teachers' median scores show a slightly larger range than teaches from other school types.

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[13] This domain brings together three aspects: professional feedback and support, professional community, and teaching as inquiry.

Figure 46 **School Practices scale—distribution of scores**
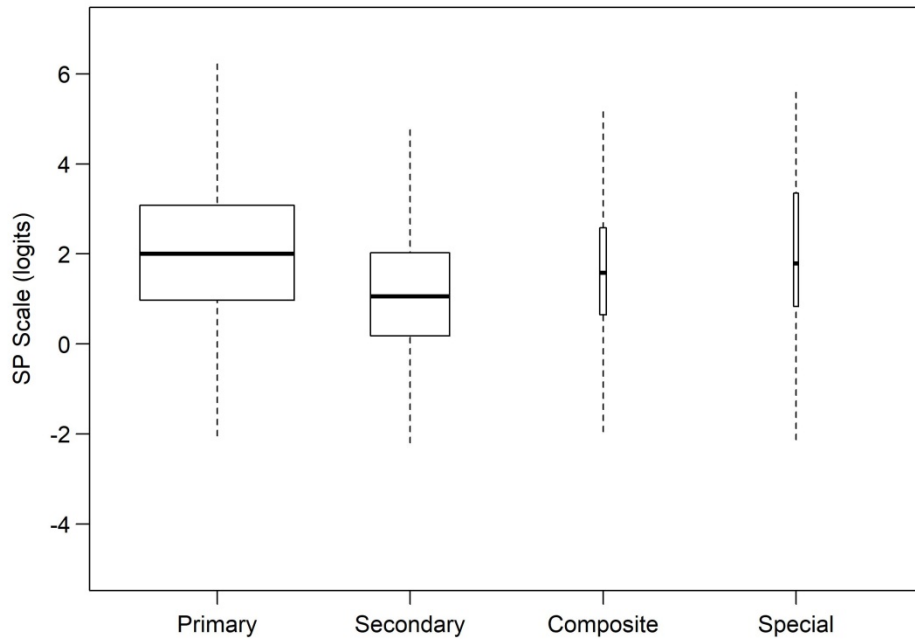
How long a teacher had taught, or whether they team-taught or not was unrelated to their views of their school's practices. Their morale and sense of the sustainability and fairness of their workload were related. Figure 47 below shows the picture for the relationship with views of the sustainability of their workload.

Figure 47 **School Practices scale and relationship with sustainability of teacher workload**
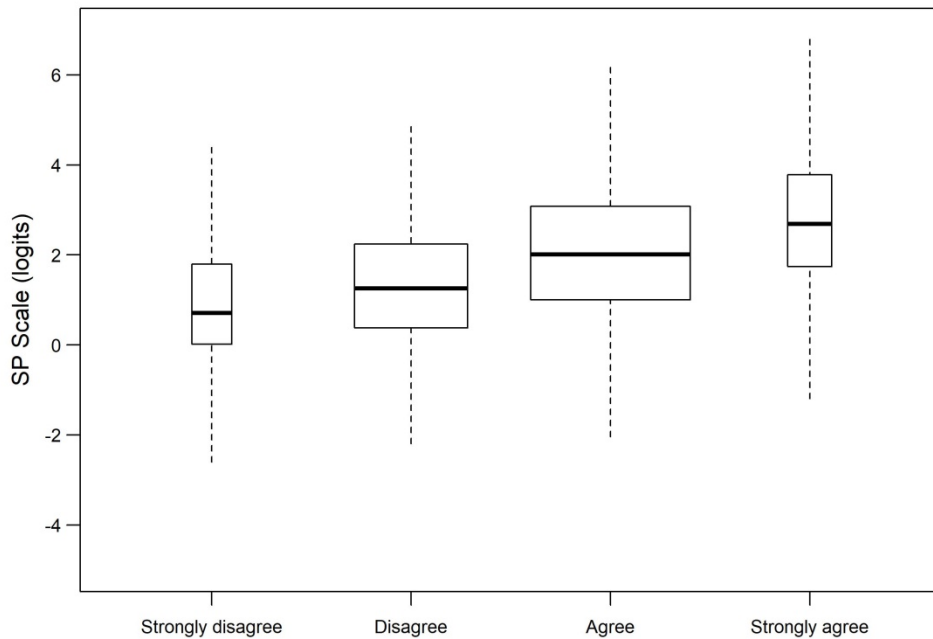
Secondary schools' mean *school* scores span a smaller range than do primary schools, as shown in the next two figures. The range of scores on the School Practices scale is wider than the range of scores on the Teaching Practices scale, more so for primary than secondary schools.

Figure 48 **Distribution of School Practices scale scores—primary schools' range**
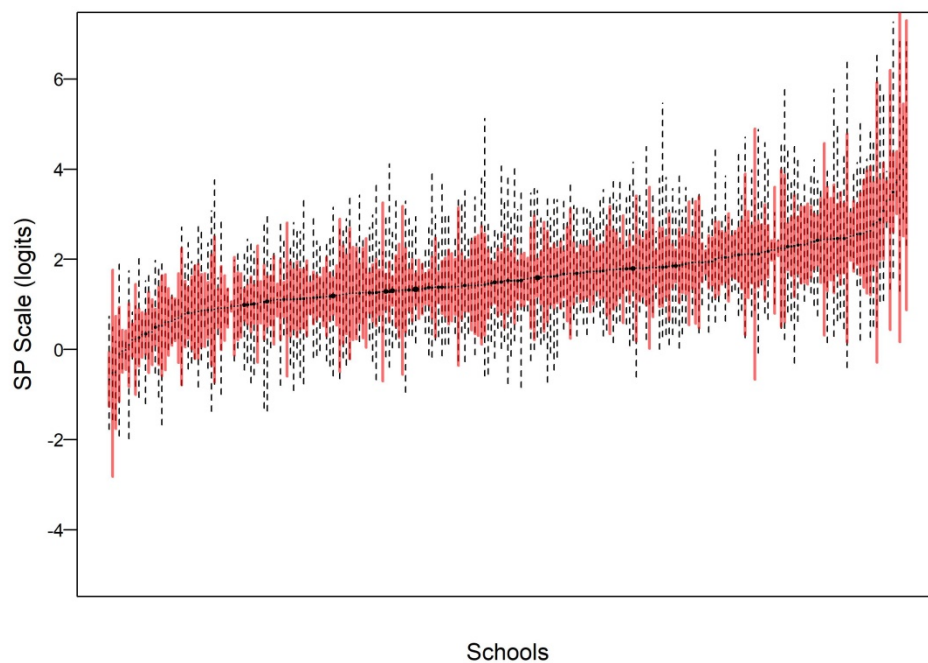
Figure 49 **Distribution of School Practices scale scores—secondary schools' range**
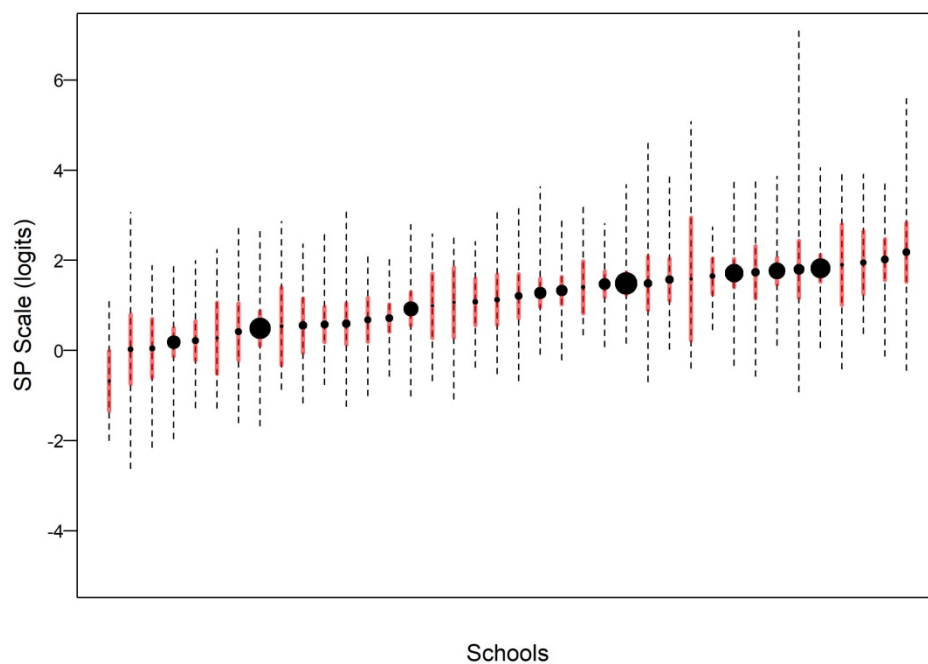
Principal Leadership scale

This scale is made up of the 19 items asked about in the Principal Leadership section of the TSP. It had a Cronbach's alpha of 0.98 and a person reliability coefficient of 0.94. It uses the responses of 2,586 primary teachers, 1,264 secondary teachers, 112 area and composite school teachers, and 86 special school teachers.

Teachers from secondary schools had somewhat lower median scores for the Principal Leadership scale; there was a wide range of scores for all teachers, as shown in Figure 50.

Figure 50 **Distribution of scores on the Principal Leadership scale by school type**
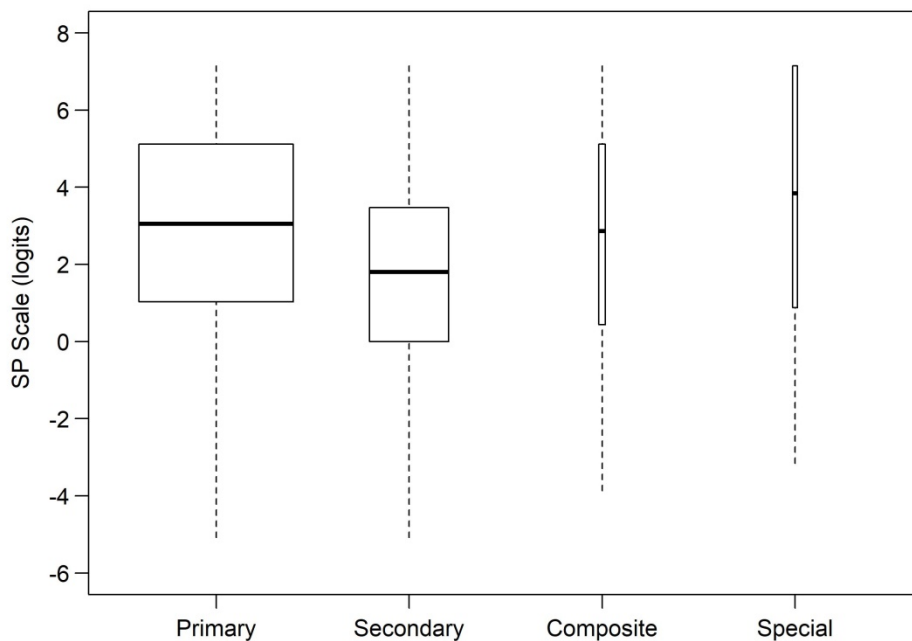
Years of teaching experience, and whether or not a teacher team-taught were not associated with views of their principal's leadership.

Not surprisingly, we found associations between teacher morale and views that their workload was sustainable or fair. The more teachers agreed that their morale was good and their workload sustainable and fair, the better they thought of their principal's leadership. Figure 51 shows the pattern for teacher views of the sustainability of their workload. A similar pattern was evident in relation to views about their morale, and the fairness of their workload.

Figure 51 **Teacher views of the sustainability of their workload in relation to their views of their principal's leadership**
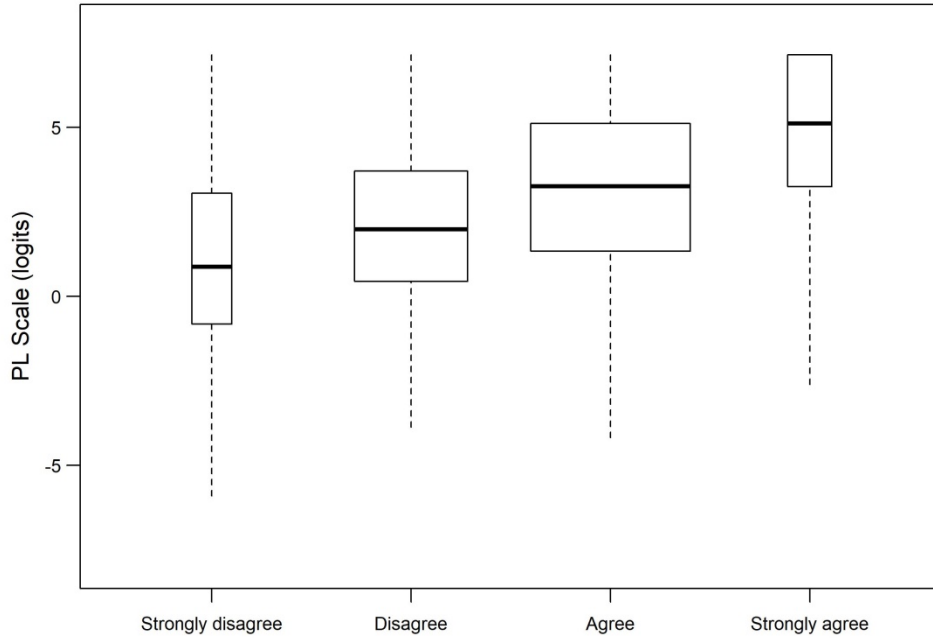
Mean *school* scores on the Principal Leadership scale show a wider range than do the School Practices or Teaching Practices scales, as shown in Figures 52 and 53. There is less consistency for secondary schools also than on the other two scales.

Figure 52 **Distribution of Principal Leadership scores—primary schools' range**
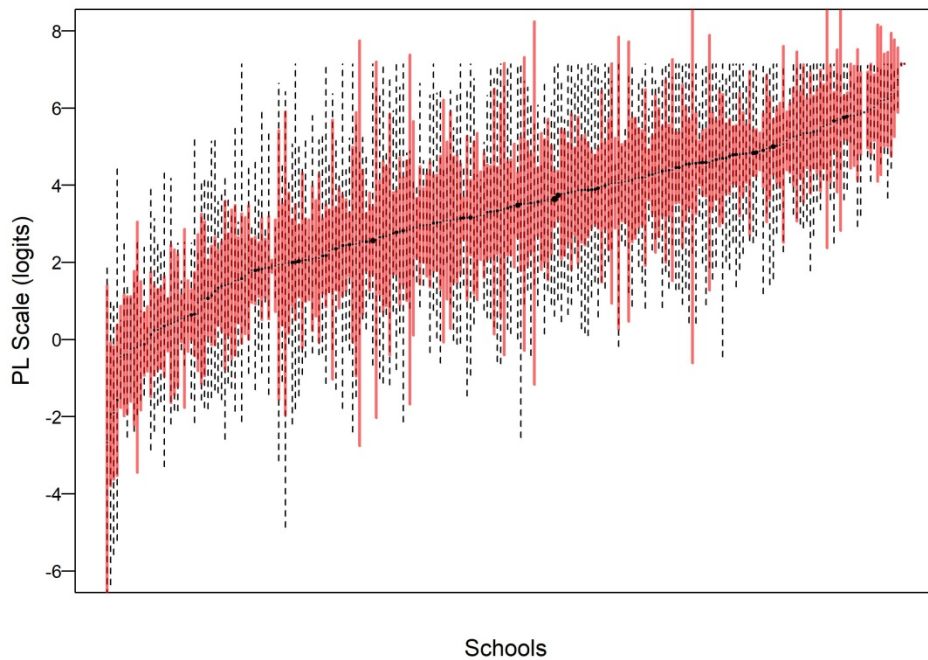
Figure 53 **Distribution of Principal Leadership scores—secondary schools' range**
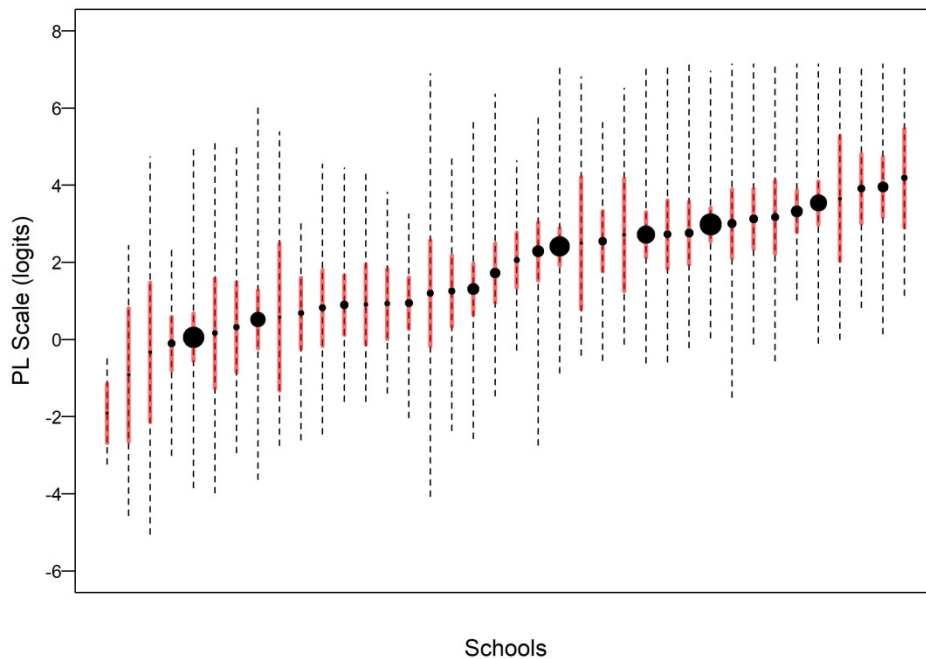
Relationships between the scales

The next figure summarises the relationships between the scales: how much do teacher responses on one scale match how they respond to the items on each of the other two scales?

The correlation coefficients[14] of teacher scores on the three scales show a strong relationship between how teachers saw their principal's leadership and how they saw school practices (r = 0.70), which is consistent with the research literature. High levels of principal leadership are associated with high levels of effective school practices.

Figure 54 also shows a medium relationship between how teachers saw school practices and the teaching practices we asked about (r = 0.32). There is a weak relationship between how teachers saw the leadership of their principal and their own teaching practices (r = 0.14).

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14 Using Pearson's correlation coefficients, where 1 = perfect match, 0 = absolutely no relationship between the two things being compared.

Figure 54 **Relationships between the TSP scales**[15]
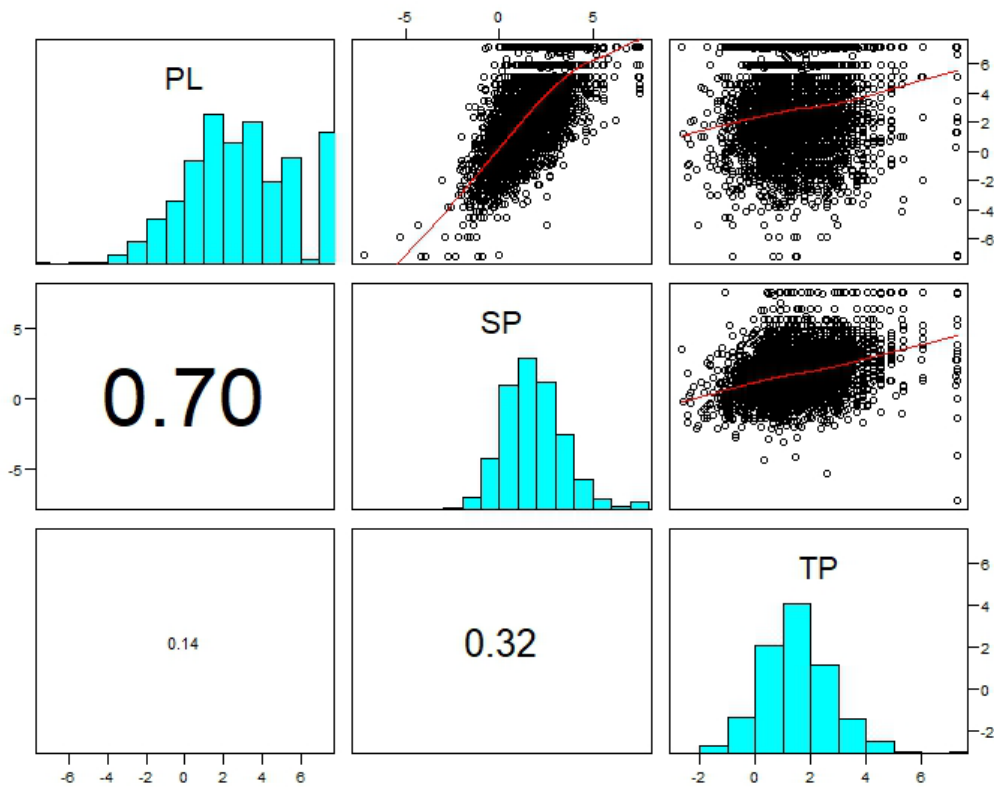
The weak relationship between the Principal Leadership and Teaching Practices scales is consistent with the research literature showing that the links between principal leadership and teaching effectiveness are indirect. As well, the Teaching Practices survey is focused on particular pedagogical practices.

We did investigate further the correlations between two domains where the School Practices and Teaching Practices might be more related: *Learning-focused partnerships* and *Teaching as inquiry*. Table 13 shows that the correlations between the *Learning-focused partnerships* items in the two surveys are much the same as the correlations between the two scales as a whole. The correlations are moderate for the items about the partnerships with parents and whānau focused on their own child's learning. What is happening at the school level is not necessarily mirrored in teaching practice, and vice versa.

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[15] PL = Principal Leadership; SP = School Practices; TP = Teaching Practices. The middle graph on the top line of this figure shows the correlation between Principal Leadership and School Practices. The right-hand graph on the top line of this figure shows the correlation between Principal Leadership and Teaching Practices. The graph in the second line of this figure shows the correlation between Teaching Practices and School Practices. The small numbers at the side of the graphs show the scale score distributions in relation to the scales (e.g., the numbers on the left column at the bottom refer to the scale scores for Principal Leadership). The bar charts show the distribution of responses for each of the scales.

Table 13 **Correlations between the *Learning-focused partnership* items in the Teaching Practices and School Practices surveys**

School Practices	School Practices				
Teaching Practices	**We seek and are responsive to parents' and whānau views about their child's learning**	**We welcome questions from parents and whānau about their child's learning in the school**	**We provide parents and whānau with opportunities to learn how to effectively support their child's learning at school**	**We seek opportunities to learn from parents and whānau how to effectively support their child's school learning**	**We actively seek the expertise of the local community, hapū, and iwi**
Use the knowledge that parents/whānau have about their child to support their child's learning (e.g., to set and review goals)	0.33	0.24	0.27	0.31	0.21
Collaborate with parents/whānau so that their expertise can be used to support collective learning in class or other school activities	0.34	0.23	0.30	0.36	0.25
Collaborate with the local community so that their expertise can be used to support learning in class or other school activities	0.24	0.15	0.23	0.29	0.32
Support the local community by ensuring students have opportunities to actively contribute to it in ways valued by the community	0.20	0.13	0.21	0.25	0.29

When we look at the *Teaching as inquiry* domains, Table 14 shows that the correlations are lower than between the two scales as a whole, indicating that there is a lack of coherence between these different aspects of inquiry in New Zealand schools, and that what is happening at the school level may be quite different from individual practice by teachers.

For example, teachers who say they analyse the impact their teaching has had on each student's learning very well are no more likely than other teachers who say they do this well, or somewhat well or not well, to be in schools where inquiry has been used to make worthwhile changes in

our teaching and student learning. This raises the question of whether the lack of correlation indicates that the analysis of impact may not feed into changes in teaching and student learning.

This is a significant finding given the weight now put on inquiry and evaluation as a prime means to continually develop capability and students' learning.

Table 14 **Correlations between the *Teaching as inquiry* items in the Teaching Practices and School Practices surveys**

Teaching Practices	School Practices			
	We look into a range of evidence when we're trying to understand why students are struggling with their learning	Teachers have a shared understanding of the process of inquiry	Everyone is engaged in some form of inquiry, including the school leadership	We have used inquiry to make worthwhile changes in our teaching and student learning
Use both information about your own students and what curriculum support documents (e.g., Effective Literacy Practice, Ka Hikitia) say about teaching and learning to help you select the best strategies and to prioritise what you teach	0.13	0.11	0.12	0.14
Use student feedback on your teaching to work out what is most important to focus on and the best strategies to use	0.05	0.11	0.06	0.10
Use what the research literature says about teaching and learning to inform your choice of strategies to use with your students	0.13	0.09	0.10	0.16
Analyse the impact your teaching has had on each student's learning	0.12	0.11	0.12	0.13

9. National reference data using scale levels

We can use the scales to get an overall picture of the levels of the teaching practices we asked about, school practices, and principal leadership experienced by New Zealand teachers. In this section we show how teachers' responses were distributed at different levels of each scale, to give a national picture that can be used as a reference point to see what changes over time from 2017.

We then provide descriptions of different levels of the scales that can be used as exemplars.

National distributions of teachers across the three scales

Below are tables giving the distributions of teachers at different levels of each scale. The wider range of experiences in relation to the Principal Leadership scale is evident in its 10 different levels; the School Practices scale has eight levels, and the Teaching Practices scale, seven levels.

We have used these distributions to create national descriptive categories. These will be made available on the TSP website as exemplars.

Table 15   **Teaching Practices: Proportion of teachers' scale scores falling in scale description categories**

Teaching Practices						
Category (logit)	-1 and under	0	1	2	3	4	5 and over
Percentage	5%	16%	33%	25%	13%	5%	2%

Table 16   **School Practices: Proportion of teachers' scale scores falling in scale description categories**

School Practices							
Category (logit)	-2 and under	-1	0	1	2	3	4	5 and over
Percentage	1%	4%	15%	24%	24%	17%	8%	6%

Table 17   **Principal Leadership: Proportion of teachers' scale scores falling in scale description categories**

	Principal Leadership									
Category (logit)	-4 and under	-3	-2	-1	0	1	2	3	4	5 and over
Percentage	1%	2%	3%	6%	8%	12%	15%	13%	10%	29%

Scale descriptions

Teaching Practices

Teachers responded to descriptions of teaching practices in five domains, rating their practice on a 4-point scale: 'very well', 'well', 'somewhat well', and 'not well'.

Level 4 (logit categories 4 and over, 7% of teachers)

Teachers at this level of the scale typically report engaging in nearly all of the practices in the domain *Optimising students' opportunities to learn* 'very well'. These include: providing authentic learning experiences in which students apply their learning in a range of meaningful contexts; engaging students in timely feedback and feedforward on their learning; ensuring students learn from taking risks, or experiments that did not succeed; engaging in in-depth curriculum-related discussions with individuals or groups; ensuring students think critically and talk about what and how they are learning; ensuring students interact with information to critique, create, and transform knowledge; and ensuring that students direct their own learning pace, content, and goals. For the domain: *Diversity, equity, and inclusion*, teachers typically report drawing on students' different languages, cultures, values, knowledges, and practices as resources for the learning of all 'very well'. They report carrying out all of the practices in the domains *Learning- focused partnerships* and *Teaching as inquiry* 'very well'.

Level 3 (logit categories 3 and 4, 38% of teachers)

Teachers at this level of the scale typically report engaging in some of the practices from the domain *Optimising students' opportunities to learn* 'very well' (such as providing authentic learning experiences in which students apply their learning in a range of meaningful contexts; and using flexible groupings to meet changing needs of individual students) and some of the practices from this domain 'well' (such as ensuring that students direct their own learning pace, content, and goals; learn from taking risks, or experiments that did not succeed; and think critically and talk about what and how they are learning). Teachers typically report carrying out all of the practices in the domain *Diversity, equity, and inclusion* 'very well' except for drawing on students' different languages, cultures, values, knowledges, and practices as resources for the learning of all, which they report carrying out 'well'. Teachers report carrying out some of the practices in the domain *Teaching as inquiry* 'well', such as information about their own students

along with curriculum support documents and research literature to decide what to teach and how best to teach it. They report carrying out all of the practices in the domain *Learning-focused partnerships* 'well' and all of the practices in the domain *Being professional* 'very well', apart from the practice of taking responsibility for the wellbeing of all the students they teach.

Level 2 (logit categories 0 and 1, 49% of teachers)

Teachers at this level of the scale typically report carrying out most of the practices in the domain *Optimising students' opportunities to learn* 'well'. These include: providing authentic learning experiences in which students apply their learning in a range of meaningful contexts; engaging students in timely feedback and feedforward on their learning; using flexible groupings to meet changing needs of individual students; engaging in in-depth curriculum-related discussions with individuals or groups; and ensuring students learn from taking risks, or experiments that did not succeed. Teachers typically report carrying out all of the practices in the domain *Diversity, equity, and inclusion* 'well', and all of the practices in the domain *Learning-focused partnerships* 'somewhat well'. They report carrying out some of the practices in the domain *Teaching as inquiry* 'well', such as: using student feedback on their teaching to work out what is most important to focus on and the best strategies to use; and analysing the impact their teaching has had on each student's learning. They report carrying out all of the practices in the domain *Being professional* 'well'.

Level 1 (logit categories -1 and under, 5% of teachers)

Teachers at this level of the scale typically report carrying out all of the practices in the domains *Optimising students' opportunities to learn*, *Diversity, equity, and inclusion* and *Teaching as inquiry* either 'not very well' or 'somewhat well'. They report carrying out all of the practices in the domain *Learning-focused partnerships* 'not very well'. Teachers typically report carrying out all the practices from the domain *Being professional* either 'somewhat well' or 'not very well', apart from taking responsibility for the wellbeing of all students they teach, which they report carrying out either 'somewhat well' or 'well'.

School Practices

Teachers responded to descriptions of school practices in six domains, using a rating scale of 'very like our school', 'moderately like our school', 'a little like our school', and 'not like our school'.

There were six levels identifiable using the scale. They have been labelled by number here; an alternative is to use confidence as a metric, ranging from 'strong confidence' to 'low confidence'.

Level 6 (logit categories 4 and 5; 14% of teachers)

Teachers at this level typically rate items at the 'very like our school' level. They include all of the strategic resource items: teachers report it is 'very like our school' to have time to work together, to undertake inquiry, and that they have effective teaching resources aligned to the

school goals. Inquiry has been used to make worthwhile changes in the school, and teachers have a shared understanding of what inquiry is.

Student views about teaching and learning are used to improve things, and every student has challenging learning goals. Teachers teach in ways that promote Māori students' belonging in the school. Curriculum in each learning area draws on and adds to content relevant to the identities of Māori students, students experience culturally responsive pedagogy, and curriculum design responds to the interests and needs of every learner. The school actively seeks the expertise of the local community, hapū, and iwi.

Teachers give each other meaningful feedback on their teaching and students' learning, and there is good support for teachers new to the school, or having difficulty helping students reach important academic and social goals.

Level 5 (logit category 3; 17% of teachers)

The domains of coherent curriculum and evaluation, professional community, and school goals come to the fore at this part of the scale, with most of the practices described in these domains seen by teachers as 'very like our school'. Other practices also seen as 'very like our school' include: everyone is engaged in some form of inquiry, including school leaders; students actively care for and support one another; appraisal focuses on improving teaching practices and student outcomes; and parent and whānau views on how to effectively support their child's school learning are sought.

Level 4 (logit category 2; 24% of teachers)

Teachers generally think the supportive and caring environment items are 'very like our school'. Other items that they see as 'very like our school' are having an effective plan to support student wellbeing and belonging, having high expectations for students in the school goals, the regular sharing of student progress in teaching teams and discussion of strategies to improve it, using things that don't work as opportunities for learning, looking into a range of evidence to understand why students may be struggling with their learning, discussing student progress and strategies to improve it for students of concern in teaching teams, seeking and being responsive to parents and whānau about their child's learning, and providing parents and whānau with opportunities to learn how to effectively support their child's learning.

Level 3 (logit categories 1 and 2, 24% of teachers)

At this point in the scale, teachers generally report most of the items related to the domains of *Provision of a coherent curriculum and evaluation*, *Professional community*, and *School goals* as 'moderately like our school'. They typically see the welcoming of questions from parents and whānau about their child's learning in the school as 'very like our school'.

Level 2 (logit category 0; 15% of teachers)

Teachers located at this point in the scale typically report the supportive and caring environment descriptions of effective school practices as 'moderately like our school'. School goals setting

high expectations for students and being based on good analysis of sound information about student learning that identified areas they could improve, having systematic monitoring of each student's progress, and specific assessments that allowed them to check that students had learnt what they set out to teach them are also typically reported as 'moderately like our school'.

Other practices typically reported as 'moderately like our school' are teachers looking into a range of evidence when trying to understand why students struggled with learning, seeing things that don't work well as opportunities for learning, providing parents and whānau with opportunities to learn how to effectively support their child's learning at school, and seeking and responding to their views about their child's learning.

Other school practices are typically seen as only 'a little like our school', particularly in relation to having good resource allocation, such as sufficient time to work together.

Level 1 (logit categories -2 and under and -1; 5% of teachers)
Typically, teachers located at this part of the scale report that the descriptions of effective school practices are only 'a little like our school' and, for a few, 'not like our school'.

Principal Leadership scale description
Teachers responded to 19 items about principal leadership, using the ratings 'very well', 'well', 'somewhat well', and 'not well'.

Level 5 (logit category 5 and over; 29% of teachers)
Teachers at the highest part of the Principal Leadership scale see their principal performing 'very well' on all of the items. What sets them apart from Level 4 is that their principal is seen to be consulting staff appropriately before making most important decisions, and promoting the principles of the Treaty of Waitangi very well.

Level 4 (logit categories 3 and 4; 23% of teachers)
Teachers at schools in this level report that their principal performs 'very well' on most items. Consulting staff appropriately before making most important decisions is typically reported as being done 'well' by their principals.

Level 3 (logit categories 1 and 2; 27% of teachers)
Teachers at this level report that their principal performs 'well' on most items. Their principal's commitment to continual improvement is typically rated as 'very well'.

Level 2 (logit categories -1 and 0; 14% of teachers)
What distinguishes this level is that teachers mainly see their principal performing 'somewhat well', with respect to most items. Teachers may report that their principal does well at caring for students, and showing commitment to continual improvement.

Level 1 (logit categories -4 and under to -2; 6% of teachers)

At this part of the Principal Leadership scale, teachers typically report that their principal is not doing well in many of their leadership activities, particularly those related to providing direction and fresh horizons. Within this level, teachers may report that principals are doing 'somewhat well' on caring for students, modelling the school values, showing commitment to school improvement, maintaining integrity in difficult situations, looking for solutions rather than blaming, and keeping staff up to date with education initiatives that could have an impact on teaching.

10. Overall patterns—a discussion

Many teachers report that the practices included in the TSP occur well or very well. Many teachers and principals also report that school practices that are known to be positively linked with student outcomes are happening in their schools. Principal leadership is generally well regarded.

Teaching practices

Most teachers are confident that they can improve all their students' learning outcomes, and feel responsible too for their students' wellbeing, indicating good levels of the self-efficacy needed for continual improvement of teaching. Other teaching practices that many teachers see themselves doing very well or well include promoting understanding of others' perspectives and points of view, and making appropriate changes in response to challenge and feedback from colleagues.

Not surprisingly, it is the practices related to the less familiar, and the aspects of *The New Zealand Curriculum* that were new, future-focused, and have not been systematically supported that fewer teachers saw themselves carrying out well or very well. These include ensuring students direct their own learning pace, content, and goals, think critically and talk about what and how they are learning, using student feedback to work out what is most important to focus on and the best strategies to use, and analysing the impact of their teaching on each student's learning.

Whether a teacher comes from a high or low decile school makes little difference to the teaching practices they report. School type shows few differences. More experienced teachers reported higher levels of practice, and those who team-taught all the time reported more use of flexible groupings, more work with parents and whānau around learning, and more confidence that they could improve the outcomes of all they taught.

School practices

The strongest school practices at a national level appear to be those associated with providing a supportive and caring environment, and information sharing related to student learning between teachers and parents and whānau. More recently emphasised practices such as teaching as inquiry, and professional feedback and support are less strong. Having sufficient resources, particularly time, is the most problematic set of school practices.

Primary teachers reported more of these practices as being very much like their school compared with secondary teachers, which may reflect differences in school size and complexity. There were some interesting differences between those who team-taught all the time and others. These differences were not evident in relation to having sufficient time for collaboration and inquiry and evaluation, indicating that having teachers work together more during the day with learners does not lead on its own to the kind of time needed for collaborative inquiry and evaluation.

Principal leadership practices

Principals' interpersonal relations and their working with others (rather than trying to do everything on their own) are highly rated, somewhat more so than their direction setting and encouraging fresh horizons. Principals tend to be more positive than teachers about their interpersonal relations, but less so on their direction setting and encouraging fresh horizons.

Looking at the context for principal leadership practices, one striking pattern is that the overall picture is similar for all principals. Sustainability of workload and being able to schedule enough time for the educational leadership component of their job are not related to principal experience, or school decile, or whether the principal also teaches. That is, there is something about the totality of the role in our schools that makes it demanding in this way, and difficult for principals to feel that they can do all that they think they should be doing. The links between being able to fit educational leadership within the principal's role, and leadership practices that set the school direction and chart fresh horizons raise some questions about what we are doing as a system to support these levers for overall development of our schools. New Zealand is not unique in facing this challenge, but it is one we need fresh approaches to if we are to see widespread improvements in teaching and learning.

Differences between schools

Schools differ quite widely on the extent to which teachers give high ratings to their own practice, school practices, and principal leadership. This suggests that there is scope to learn from the schools that have embedded strong teaching, school, and principal leadership practices.

The practices that differ least among schools and which also have low median proportions of teachers saying that they do something very well, or that a school practice is very like our school, or that the principal does something very well signal some common challenges for all schools, and attention is needed to a more strategic approach to supporting schools. They include:

- the new aspects of *The New Zealand Curriculum*: developing student capabilities of agency, critical thinking, use of feedback, and in-depth curriculum discussion

- realising the potential of teaching as inquiry, including protecting the time for teacher inquiry and evaluation, teachers having a shared understanding of inquiry, and using inquiry to make worthwhile changes in teaching and learning
- working collaboratively
- keeping up to date with new knowledge
- drawing on students' different languages, cultures, values, knowledges, and resources for the learning of all
- working with the local community, hapū, and iwi
- having challenging goals for every student
- curriculum in every learning area that draws on and adds to content relevant to the identities of Māori students.

Working collaboratively in and across schools

We found that the level of working collaboratively *within* a school was related to the gains that teachers were reporting from the early days of the collaboration across schools through Kāhui Ako. It was encouraging to see that around a third of teachers were finding that their school's involvement in Kāhui Ako was giving them some gains, though more so around collaboration opportunities than inquiry capacity or teaching practice. Gains were highest for the Kāhui Ako across-school roles, followed by the within-school roles, then other teachers.

Principals reported more gains from Kāhui Ako than teachers, and Kāhui Ako leaders reported more gains for their school's teaching capability and capacity for inquiry than other principals.

School practices for Māori learners

Bringing items relating to how well school practices support Māori learners together across the different domains showed that these items were related, and that teacher views of how much they were like their school was not related to the proportion of Māori learners in the school. There was, as with other school practices, a wide range of difference between school proportions of teachers thinking these practices were very like their school.

Relations between principal leadership, school practices, and teaching practices

Our construction of scales for each of the three aspects of the TSP allows us to look at how correlated these are: what one might infer, for example, of the strength of school practices by looking at the strength of principal leadership.

There is a strong relationship between teachers' views of their principal's leadership and their school's practices. There is a medium relationship between their views of school practices, and the teaching practices we asked about. However, it is weak in relation to teaching as inquiry,

indicating a lack of coherence that is concerning given the weight now put on this to keep developing the quality of capability and the quality and outcomes of student learning.

The relationship between teacher views of principal leadership and their views of their own teaching practices is weak: one cannot infer the quality of the teaching practices included in the TSP from the quality of principal leadership.

Using the national picture to support ongoing improvement

The TSP findings provide a common language for teachers, school leaders, those they work with to develop their capabilities, and the government agencies to work together and identify where different expertise and focus could be best placed to improve teaching and learning. There are some key areas of practice that we would identify as fruitful to focus on in a coherent way across the school system. Most are present in the Professional Standards, and ERO's evaluation indicators, and guidance for Kāhui Ako, and *The New Zealand Curriculum*. The TSP national picture shows that these frameworks need more support to play the roles expected of them.

These key practice areas are:

- developing student agency in their learning, including their understanding of how to participate in and contribute to community
- developing 21st century skills such as critical thinking
- drawing on students' differences as resources for all
- strengthening Māori student identities
- strengthening partnerships with parents and whānau around student learning
- teaching as inquiry
- ensuring that teachers get the time they need to undertake inquiry and collaborative work (e.g., by reworking school days and allocations).

The TSP shows that there are schools and teachers we can learn from, but that we have to think *how* schools and teachers can best learn from each other, and how that fits with what is being asked of them by government agencies, and the support they can call on to develop and use new understandings.

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