TALIS 2018

The Teaching and Learning International Survey

AUSTRALIAN REPORT

Volume 2

Teachers and school leaders as valued professionals

Sue Thomson
Kylie Hillman

Australian Council *for* Educational Research

ACER

This publication has been produced by ACER, under contract with the Australian Government Department of Education. Funding was provided by the Australian Government and state and territory governments.

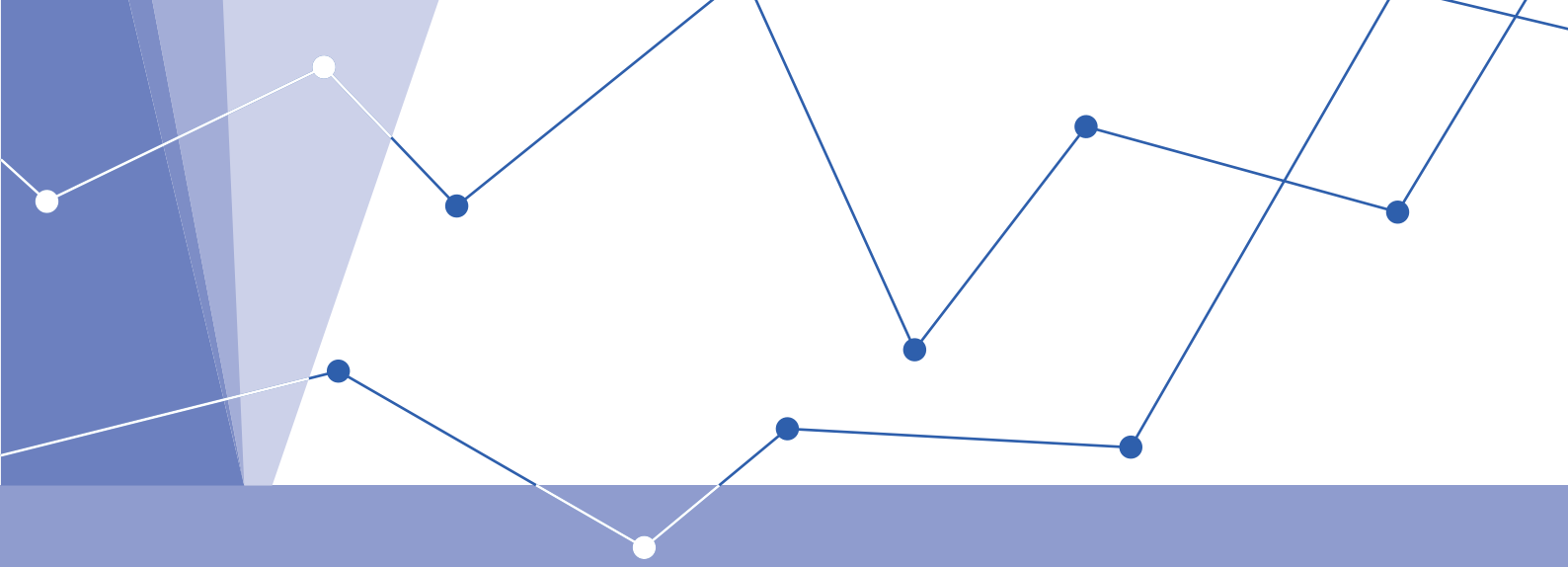
ISBN: 978-1-74286-598-0

Contents

List of Tables

List of Figures

List of Boxes



Abbreviations

ACER	Australian Council for Educational Research
CABA	Ciudad Autonoma de Buenos Aires
ICT	Information and Communication Technology
IEA	International Association for the Evaluation of Educational Achievement
NRBA	Nonresponse bias analysis report
ISCED	International Standard Classification of Education
OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
PPP	purchasing power parity
SE	Standard Error
TALIS	Teaching and Learning International Survey
TIMSS	Trends in International Mathematics and Science Study

Executive Summary

The OECD Teaching and Learning International Survey (TALIS) collects internationally comparable data on the learning environment and the working conditions of teachers and principals in schools across the world. It offers teachers and principals the opportunity to provide their perspectives on the state of education in their own countries, allowing for a global view of teachers, the education systems in which they work, and the successes and challenges faced by teachers and school leaders. The study's main objective is to "generate internationally comparable information relevant to developing and implementing policies focused on school leaders, teachers and teaching, with an emphasis on those aspects that affect student learning" (OECD, 2019a, p. 19). TALIS provides a voice to teachers and school leaders, and allows them the opportunity to reflect on and discuss their practice and find ways to enhance it. TALIS provides information required by policymakers to assist them to review and develop policies that promote the teaching profession and provide optimal conditions for effective teaching and learning.

TALIS 2018 is the third cycle of TALIS, and Australia has participated in each cycle. While the main focus of TALIS is on teachers and principals in lower secondary education (Years 7-10 in the Australian school system, or ISCED level 2 internationally), countries in TALIS 2018 were given the option to survey teachers and principals in their primary (ISCED level 1) and upper secondary (ISCED level 3) schools, and to participate in a TALIS–PISA link option, which involved conducting the TALIS survey in schools that participated in the 2015 Programme for International Student Assessment (PISA). As well as the main lower secondary survey, which is the focus of the reports, Australia participated in 2013) because the three larger states (New South Wales, Victoria and Queensland the primary school option and in the TALIS–PISA link.

In Australia, a nationally representative sample of 4,000 teachers and principals from 200 lower secondary schools was randomly selected to participate in the study. The sample drawn was larger than in previous years (2,059 teachers and 149 schools in TALIS) chose to draw a larger sample in order to increase the reliability of the estimates within their jurisdictions. In Australia, 3,573 lower secondary teachers and 230 principals completed the TALIS questionnaires. The Australian Council for Educational Research (ACER) conducted TALIS 2018 in Australia on behalf of the Australian Government Department of Education, and the Australian State and Territory Departments of Education. The main survey for TALIS 2018 was conducted in 31 OECD countries and economies and 17 partner (non-OECD) countries and economies

Technical standards for TALIS set out by the OECD require countries to reach specified response rate targets. A minimum of 50 per cent of schools from the original sample of schools is required to participate for data to be included in the international database, and due to a range of factors, Australia

did not meet the response rate targets set by the OECD for lower secondary school principals, or primary principals or teachers. It did meet the required response rate for lower secondary teachers.

To assess the quality of the data collected an extensive non-response bias analysis (NRBA) was conducted. An NRBA examines the extent to which the response characteristics of principals and teachers who respond to a survey are different from the response characteristics of the principals and teachers that did not respond. This analysis compared the characteristics of the TALIS respondents with those available from independent population statistics. When compared to official independent data on Australian schools, across most characteristics the distribution of participating schools was similar to national profiles. The NRBA concluded that despite the response rate of originally sampled schools falling just below the threshold, the data collected showed no significant bias and could be taken as representative of Australian schools and teachers.

This report provides more detail on Australia's results, and complements the OECD report of the same name (OECD, 2019a) by providing a more focused comparison of Australia with a group of high-performing countries as well as the OECD and TALIS averages. The group of countries chosen for comparison for the lower secondary sample were the countries that significantly outperformed Australia in all three assessment domains in PISA 2015: Alberta (Canada), Estonia, Finland, Japan, and Singapore. This report also provides analysis on trends in Australia which are not reported in the OECD report due to issues with sampling, and presents data from the primary school samples where it is relevant (comparing findings from primary and lower secondary schools in Australia).

Teacher professionalism is analysed in TALIS 2018 by looking at five pillars: the knowledge and skills required to teach; career opportunities and working regulations; the collaborative culture among teachers; the responsibility and autonomy afforded to teachers; and the status of the profession. The focus of the first volume *Teachers and School Leaders as Lifelong Learners* (Thomson & Hillman, 2019) was on the first pillar, the knowledge and skills dimension, as well as the changing contexts for teaching. This second volume, *Teachers and School Leaders as Valued Professionals*, addresses the final four pillars: career opportunities, collaboration, autonomy and prestige.

How do society and teachers view the teaching profession?

In Australia, the Alice Springs (Mparntwe) Education Declaration commits all Australian governments to working with the education community to attract, develop, support and retain high-quality teachers. While the vast majority (more than 90%) of Australian teachers indicated that altruistic reasons motivated their career choice (Thomson & Hillman, 2019, p. 72), perceptions about the prestige of the teaching profession are still critical to attracting high-quality candidates into the profession.

Most Australian teachers (67%) and principals (74%) reported that they are satisfied with their salary, and a higher proportion of both teachers and principals (78% and 84% respectively) reported being satisfied with other terms of their employment. While about one-third reported wondering whether they had chosen the right profession, few expressed any regrets about becoming a teacher.

Across the OECD, only 26 per cent of teachers feel that they are valued by society. Australian teachers feel more positive than this, though fewer than half (45%) feel that they are valued. Male teachers and younger teachers in Australia more often report feeling valued. Teachers who reported feeling valued in society are more likely to have decided on teaching as a first career choice, and previous TALIS findings indicate that teachers who opted for teaching as a first-choice career were more likely to be satisfied with their job and to report higher levels of self-efficacy (OECD, 2019, Table I.4.6).

The majority of Australian teachers were very positive about their profession. Most (88%) agreed that the advantages of being a teacher clearly outweighed the disadvantages, and that they would choose to work as a teacher if given the choice again (83%). While one-third of teachers reported wondering whether they had chosen the right profession, just 6 per cent expressed any regrets about becoming a teacher.

Around one in five (22%) Australian teachers reported that they would like to leave teaching within the next five years. Within the group of Australian teachers under 50 years of age (thus, well before

retirement age), 13 per cent of teachers reported wanting to leave. Both across the OECD on average and in Australia, teachers who are experiencing stress in their work are around twice as likely as their less-stressed colleagues to report wanting to leave the profession in the next five years. Teachers reported that their main source of stress, by far, is having too much administrative work. Teacher stress is much higher in schools serving high proportions of students from disadvantaged homes (than in schools with low proportions of such students) and in Australia this difference (in teacher stress levels across the two school types) is by far the largest across the OECD.

What are the main features of teachers' employment contracts and how do they feel about them?

The majority of Australian teachers are employed on permanent contracts, with only 14 per cent reporting that their employment contract is temporary. Among teachers under the age of 30, however, the proportion rises to around 35 per cent. While there is flexibility involved in working on a temporary contract, teachers working on such contracts reported feeling less confident in their ability to teach.

About 16 per cent of the teaching workforce is employed on a contract that is less than full-time. Teaching workloads are high, even for those who are not teaching full-time. Around 87 per cent of teachers who contracted to work over 90 per cent of full-time hours, work more than 35 hours a week. Around one-quarter of teachers who are contracted to work 70 per cent of a full-time load or less also work more than 35 hours a week.

Australian teachers and principals reported being satisfied with their salary and conditions to a much greater extent than the OECD average. Just over two-thirds (67%) of Australian teachers and 74 per cent of principals reported that they are satisfied with their salary, compared with 39 per cent of teachers and 47 per cent of principals on average across the OECD. Satisfaction with salaries is lower in publicly managed schools and in schools with high concentrations of students from socioeconomically disadvantaged backgrounds or immigrant students. A higher proportion of both teachers (78%) and principals (84%) reported that they are satisfied with other terms of their employment, compared to OECD averages of 66 per cent for both groups. Teachers who reported that their school provides staff with opportunities to actively participate in school decisions and support their professional development are more likely to say they are satisfied with their employment conditions.

Teachers' satisfaction with the terms of their employment contract is significantly and negatively associated with the desire to change to another school and with the intention to leave teaching within the next five years. Teachers who are satisfied with their terms of employment are more likely than those who are not to want to continue working as teachers, and to do so in the same school. On the other hand, teachers who are not satisfied are likely to leave or to want to change schools. In particular, 35 per cent of Australian teachers at schools with high levels of students from socioeconomically disadvantaged backgrounds would like to change schools, compared with 23 per cent of teachers at less disadvantaged schools.

Teacher appraisal can be an important tool, not only for quality assurance but as an opportunity for teachers to reflect on their teaching practice and their strengths and weaknesses. In Australian schools, appraisals are most often conducted by members of the school management team other than the principal, or by the teacher's mentor. On average across OECD countries it is more common for school principals to conduct appraisals. Appraisals in Australian schools are most likely to consist of observations of classroom teaching, student feedback and students' results. Assessment of teachers' content knowledge is reported by about 60 per cent of Australian principals as a method of appraisal, compared with the OECD average of 70 per cent.

How do teachers work together as professionals and what impact does this have?

TALIS 2018 asked teachers to report on the frequency with which they participated in various forms of professional collaboration. Australian teachers reported participating in activities for exchange

and co-ordination for teaching to a greater extent than the OECD average, such as discussions about the learning development of specific students (80% of Australian teachers and 61% across the OECD doing this at least once a month) and exchanging teaching material with colleagues (78% of Australian teachers and 47% across the OECD doing so at least once a month).

Fewer teachers in TALIS reported engaging in deeper forms of professional collaboration – team teaching, professional feedback after class observations, engaging in collaborative professional learning. Teachers who reported engaging in in professional collaboration with their colleagues more often also reported higher levels of job satisfaction and self-efficacy, and also reported a higher use of cognitive activation strategies in their classrooms. These are the types of activities that encourage students to evaluate, integrate and apply knowledge in problem-solving. While only 11 per cent of Australian teachers (compared to the OECD average of 9%) reported providing observation-based feedback to colleagues, a much larger proportion reported participating in collaborative professional learning at least once a month (39% compared to the OECD average of 21%). Teacher collaboration is more prevalent in some Australian schools than others, suggesting that school-level priorities, values or policies may be shaping the extent to which Australian teachers participate in collaborative activities with their peers.

Feedback from peers can be viewed as a form of collaboration, in that it involves interactions and relationships between colleagues with a shared goal of improvement. More than 85 per cent of Australian teachers received feedback after observation of their classroom, up from 70 per cent in TALIS 2013 and a little higher than the OECD average of 80 per cent. While the proportion of Australian teachers who reported having been assessed on their content knowledge remains below the OECD average in TALIS 2018 (43% compared to 50%), there has been a significant increase in this method of feedback since TALIS 2013 (33%). Teachers were more likely to report finding feedback useful for their teaching practice when the feedback came from multiple sources, and less likely to find feedback from a single source useful. In Australia, and across OECD countries on average, teachers who reported having been observed while teaching their classes and who had had their content knowledge assessed were twice as likely to report that the feedback was useful, irrespective of other forms of feedback received or teachers' other characteristics.

How much control do teachers and school leaders have over their practice and their working environment?

What happens in the classroom remains largely at teachers' discretion: over 90 per cent of Australian teachers say that it is up to them to select teaching methods, discipline students and set the amount of homework to assign. This was similar to the OECD average. However, Australian teachers reported lower levels of professional autonomy over assessing student learning (87% compared to OECD average of 94%) and determining course content (73% compared to OECD average of 84%).

Australian teachers who reported higher levels of autonomy in decision-making that impacts on their class tend to feel more confident in their teaching, are more satisfied with their work, and reported lower levels of stress and impact of work on their mental and physical wellbeing.

Australian teachers, and those across the OECD on average, hold low levels of responsibility for issues concerning staffing and budgeting. Less than 10 per cent of Australian teachers held responsibility for budget allocations within the school or for appointing or hiring teachers, similar to the OECD average. Australian principals reported higher rates of autonomy than the OECD average in tasks such as appointing and hiring teachers (89% of Australian principals compared to 70% across the OECD on average), and budget allocations within the school (96% of Australian principals compared to 71% across the OECD on average).

Almost all Australian principals reported that their school management team included the principal and/or the deputy principal/s, but only 30 per cent included teachers. Across the OECD on average, 56 per cent of principals reported that teachers have such a role.

Reader's Guide

Classification of levels of education

The classification of the levels of education used in TALIS 2018 reporting is based on the revised International Standard Classification of Education (ISCED-97). ISCED is an instrument for compiling statistics on education internationally and distinguishes between six levels of education:

- Pre-primary education (ISCED level 0)
- Primary education (ISCED level 1)
- Lower secondary education (ISCED level 2)
- Upper secondary education (ISCED level 3)
- Post-secondary non-tertiary level of education (ISCED level 4)
- Tertiary-type A education (ISCED level 5A)
- Tertiary-type B education (ISCED level 5B)
- Advanced research qualifications (ISCED level 6).

The new coding scheme for ISCED 2011 was not available at the time of the TALIS 2018 data collection.

Country coverage

The TALIS 2018 publications feature data on 34 countries and economies, including 24 OECD countries and 10 partner countries and economies. The complete list of countries that participated in TALIS 2018 is presented in Chapter 1 (Table 1.1).

Data underlying the figures

The data referred to in this volume are presented in the *TALIS 2018 Results: Teachers and School Leaders as Lifelong Learners* (https://doi.org/10.1787/1d0bc92a-en) with some greater details available in Annex C of that volume. Data pertaining to the Australian national option questions are presented in the Appendices of this report.

Notes for Tables

All tables are reproduced from OECD (2019), *TALIS 2018 Results (Volume 2): Teachers and School Leaders as Lifelong Learners*. Paris, OECD Publishing. https://doi.org/10.1787/1d0bc92a-en

Two symbols are used to denote non-reported estimates:

a: The question was not administered in the country because it was optional or it is part of a questionnaire from a TALIS cycle the country has not participated in. Therefore, data are missing.

c: There are too few or no observations to provide reliable estimates and/or to ensure the confidentiality of respondents (i.e. there are fewer than 10 schools/principals and/or 30 teachers with valid data; and/or the item non-response rate [i.e. ratio of missing or invalid responses to the number of participants for whom the question was applicable] is above 50%).

Definitions of groups and comparison countries

This report features results for teachers and school principals working in schools providing lower secondary education (ISCED Level 2) in 48 countries and economies, as well as in 2 sub-national entities (the Flemish Community of Belgium and the French Community of Belgium) that opted for their data to be adjudicated. It also features results for school principals in 15 countries and economies and for primary teachers and principals in Australia (ISCED level 1).

High-performing PISA countries

A group of five countries and economies – Alberta (Canada), Estonia, Finland, Japan, and Singapore – were selected as a comparison group for this report. These five entities performed at a level significantly higher than Australia in all three domains of PISA 2015. Within the report they are referred to as "high-performing PISA countries" (referring to the sub-national entity of Alberta as a country for ease of reading).

Novice and more experienced teachers

Teachers' self-reports of years of experience in the teaching profession were used to create two groups of teachers for use in comparisons – Novice teachers were those who reported five years or less of teaching experience while More Experienced teachers were those with more than five years of teaching experience.

Publicly managed and privately managed schools

A publicly managed school is defined by the OECD as a school whose principal reported that it is managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise. Similarly, a privately managed school is a school whose principal reported that it is managed by a non-governmental organisation (e.g. a church, trade union, business or other private institution). In the Principal Questionnaire, this question does not make any reference to the source of the school's funding.

In Australia, the more common comparison would be between government and non-government schools. In keeping with the international nature of TALIS, the categories of publicly and privately managed are used here, as they are the terms used in the international questionnaires and reports.

Statistics and analysis

The primary focus of this report is the statistics and analysis derived from the survey responses of teachers of lower secondary education and the principals of their schools. Some parallel analysis of the responses of primary teachers and principals (level 1 of ISCED-97) was also conducted and is reported in this volume.

Means and international averages

The OECD and TALIS averages correspond to the arithmetic mean of the respective country estimates. They are calculated for most indicators based on the main survey data (ISCED 2 level) presented in this report.

The system-level estimates of countries that have not met the standards for TALIS participation rates are excluded from the international averages. This is the case for the estimates based on the responses of lower secondary principals in Australia.

In the case of some countries, data may not be available for specific indicators, or specific categories may not apply. Readers should, therefore, keep in mind that the terms 'OECD average' and 'TALIS average' refer to the countries included in the respective averages. Each of these averages may not necessarily be consistent across all columns of a table.

The number of countries or economies included in an international average is indicated next to that average:

OECD average-31: arithmetic average based on ISCED 2 teacher data across 31 OECD countries and economies with adjudicated data. The report refers to the average teacher 'across the OECD' as equivalent shorthand for the average teacher 'across the 31 OECD countries and economies participating in TALIS'.

OECD average-30: arithmetic average based on ISCED 2 principal data across 30 OECD countries and economies with adjudicated data. The report refers to the average school or principal 'across the OECD' as equivalent shorthand for the average school or principal 'across the 30 OECD countries and economies participating in TALIS'.

TALIS average-48: arithmetic average based on ISCED 2 teacher data across 48 TALIS 2018 countries and economies with adjudicated data.

TALIS average-47: arithmetic average based on ISCED 2 principal data across 47 TALIS 2018 countries and economies with adjudicated data.

Odds ratios

An odds ratio indicates the degree to which an explanatory variable is associated with a categorical outcome variable and is calculated following a logistic regression. An odds ratio below one denotes a negative association; an odds ratio above one indicates a positive association; and an odds ratio of one means that there is no association.

Regression coefficients

A regression coefficient (ß) indicates the degree to which an explanatory variable is associated with a non-categorical outcome variable. For example, a statistically significant regression coefficient of 3.5 would indicate that for every change of 1 unit in the explanatory variable, the outcome variable would increase by 3.5 units.

Statistical significance

The term 'significant' is used to describe a difference that meets the requirements of statistical significance at the 0.05 level, indicating that the difference is real, and would be found in at least 95 analyses out of 100 if the comparisons were to be repeated. It is not to be confused with the term 'substantial', which is qualitative and based on judgement rather than statistical comparisons. A difference may appear substantial but not statistically significant (due to factors that affect the size of the standard errors around the estimate, for example) while another difference may seem small but reach statistical significance because the estimate was more accurate.

To avoid repetition of the phrase 'statistically significant' throughout the report, only those differences that reach statistical significance are discussed as differences.

Reporting conventions

Rounding of figures

Totals, differences and averages are always calculated on the basis of exact numbers and are rounded only after calculation. Due to this rounding, some figures in tables may not exactly add up to the totals presented.

All standard errors in this publication have been rounded to one decimal place. Where the value 0.00 is shown, this does not imply that the standard error is zero, but that it is smaller than 0.005.

Further documentation

For further information on TALIS documentation, the instruments and methodology, see the *TALIS 2018 Technical Report* and the TALIS website (www.oecd.org/edu/school/talis.htm).

CHAPTER 1

Overview of TALIS 2018

1.1 Introduction/Aims of the study

The OECD TALIS collects internationally comparable data on the learning environment and the working conditions of teachers and principals in schools across the world. It offers teachers and principals the opportunity to provide their perspectives on the state of education in their own countries, allowing for a global view of teachers, the education systems in which they work, and the successes and challenges faced by teachers and school leaders. The study's main objective is to "generate internationally comparable information relevant to developing and implementing policies focused on school leaders, teachers and teaching, with an emphasis on those aspects that affect student learning" (OECD, 2019, p. 19). TALIS provides a voice to teachers and school leaders, and allows them the opportunity to reflect on and discuss their practice and find ways to enhance it. TALIS provides information required by policymakers to assist them to review and develop policies that promote the teaching profession and provide optimal conditions for effective teaching and learning.

1.2 Themes for TALIS 2018

TALIS is composed of two online surveys: one for school principals and another for teachers. As in previous cycles, the primary focus of TALIS remains on lower secondary education (Years 7–10 in the Australian school system, or ISCED[1] level 2). TALIS 2018 also gave countries the option of surveying teachers and principals in their primary (ISCED level 1) and upper secondary (ISCED level 3) schools, and participating in a TALIS–PISA link option, which involved conducting the TALIS survey in schools that participated in PISA 2015. As well as the main lower secondary survey, which is the focus of this volume, Australia participated in the primary school option and in the TALIS–PISA link, which will be reported separately in 2020.

Nine themes were selected for inclusion in the TALIS 2018 surveys:

- teachers' instructional practices
- school leadership
- teachers' professional practices
- teacher education and initial preparation

1 The International Standard Classification of Education (ISCED) identifies comparable levels of education across countries.

- teacher feedback and development
- school climate
- job satisfaction
- teacher self-efficacy
- teacher human resource measures and stakeholder relations.

Two cross-cutting themes were added to this list:

- innovation
- equity and diversity.

1.3 Participants in TALIS 2018

1.3.1 Countries

The first cycle of TALIS was conducted in 2008, with 24 countries participating. The second cycle was conducted in 2013 with 34 countries and economies participating. TALIS 2018 has expanded further, with 48 countries and economies involved. Australia has participated in all three cycles of the TALIS survey.

The main survey for TALIS was conducted in the following 31 OECD countries and economies and 17 OECD partner countries and economies (Table 1.1).

TABLE 1.1 TALIS 2018 participating countries and economies

OECD countries and economies			
Alberta (Canada)	Australia	Austria	Belgium
Belgium (Flemish Community)	Chile	Colombia	Czech Republic
Denmark	England (UK)	Estonia	Finland
France	Hungary	Iceland	Israel
Italy	Japan	Korea	Latvia
Lithuania	Mexico	Netherlands	New Zealand
Norway	Portugal	Slovak Republic	Slovenia
Spain	Sweden	Turkey	United States
OECD partner countries and economies			
Brazil	Bulgaria	Ciudad Autonoma de Buenos Aires (CABA Argentina)	
Croatia	Cyprus	Georgia	Kazakhstan
Malta	Romania	Russian Federation	Saudi Arabia
Shanghai (China)	Singapore	South Africa	Chinese Taipei
United Arab Emirates	Viet Nam		

1.4 Overview of TALIS 2018 in Australia

As was the case for the two previous cycles of TALIS, the Australian Government Department of Education commissioned the Australian Council for Educational Research (ACER) to oversee and conduct the implementation of TALIS 2018 in Australia. At an international level, TALIS was co-ordinated and managed by the International Association for the Evaluation of Educational Achievement (IEA), and the study's implementation was overseen by IEA Hamburg. The IEA Secretariat was responsible for overseeing the quality control of the data collection, and Statistics Canada was responsible for developing the sampling plan, drawing samples, calculating sampling weights and advising on the calculation of sampling errors.

Ultimately the OECD has overall responsibility for managing TALIS and monitoring its implementation in participating countries.

In each country participating in TALIS, a representative sample of 4,000 teachers and their principals from 200 lower secondary schools was randomly selected for the study. For the purpose of TALIS, a teacher was defined as "one whose primary or major activity in the school is student instruction, involving the delivery of lessons to students" (OECD, 2014, p. 28), and who was not a teacher aide, a pedagogical support staff member or a health and social support staff member. Also excluded from the target population of teachers were substitute, emergency or occasional teachers, teachers teaching adults exclusively and teachers on long-term leave.

In Australia, a nationally representative random sample was drawn from a list of all Australian schools, stratified by jurisdiction, sector and geographic location. The sample is much larger than in previous cycles (2,059 lower secondary teachers and 149 principals participated in TALIS 2013) as the three larger states (New South Wales, Victoria and Queensland) chose to draw a larger than required sample in order to increase the reliability of the estimates in their own jurisdiction. In Australia, 3,573 lower secondary teachers and 230 principals completed the TALIS questionnaires.

1.4.1 Australian teachers and principals – and a discussion of response rates

School participation in TALIS is voluntary in Australia. The technical standards for TALIS set out by the OECD require countries to reach specified response rate targets. A minimum of 50 per cent of schools from the original sample of schools is required to participate for data to be included in the international database. Australia has met these targets in previous cycles, and again met the target for lower secondary teachers (50.3%) in this third cycle. However, due to a range of factors, Australia had difficulty in attaining the minimum response rate of originally sampled schools.

Following data cleaning and the formal OECD adjudication process, Australia fell just short of the target for lower secondary school principals (49.0%), primary school teachers (47.2%) and primary school principals (46.2%). After taking replacement schools into account, however, Australia did meet the targets for lower secondary schools and teachers, as shown in Table 1.2, but did not meet the targets for primary school principals or teachers.

As a result, the Australian data for lower secondary teachers is reported in the international TALIS report and in the body of the OECD tables, but the data for lower secondary principals, and primary principals and teachers, is not reported in the body of the international report, and is annotated in the OECD TALIS tables as "participation rate is too low to ensure comparability".

TABLE 1.2 Australia's preliminary response rates mapped onto the adjudication rules for school and teacher data in TALIS 2018

School participation		Teacher participation after replacement or non-participating schools	Risk of teacher non-response bias	Rating	
Before replacement	After replacement				
≥ 75%	≥ 75%	≥ 75%		good	
		50% – 75%		fair	
		77% 78% ≥ 75%		fair	
50% 50% – 75%	77% ≥ 75%	50% – 75%	low	fair	
			high	poor	ISCED 2
50% – 75%	50% – 75%			poor	
< 50%	≥ 75%			poor	
46% < 50%	72% < 75%	insufficient			ISCED 1

Typically, when a school or teacher does not respond to a survey, that unmet contribution to the survey is shifted to other similar schools and teachers in the sampling frame through the production of weights. This process assumes the schools and teachers not responding to the survey have the same response characteristics as the schools and teachers that do respond. When this assumption is not true, a bias in the estimates is introduced. This bias could lead to incorrect conclusions about the schools and teachers in Australia. Therefore it was necessary for Australia to conduct a nonresponse bias analysis (NRBA). In the case of TALIS, non-response bias occurs when the response characteristics of schools and teachers that do not respond to a survey are different from the response characteristics of the schools and teachers that do respond.

The NRBA carried out for Australia used data collected through the TALIS surveys and sampling frame, and compared the characteristics of respondents with independently available population statistics. The analysis explored whether there were significant differences between the respondents of TALIS and a similar data source.

The analyses aimed to demonstrate that despite the response rate of originally sampled schools falling just below the threshold, the data collected showed no significant bias and could be taken as representative of Australian teachers.

When compared to official independent data on Australian schools, across most characteristics the distribution of participating schools was similar to national profiles. The NRBA concluded that despite the response rate of originally sampled schools falling just below the threshold, the data collected showed no significant bias and could be taken as representative of Australian schools at the national level.

For this report, the Australian data have been placed in tables and figures as if all groups had met the OECD criteria, and while ACER's analysis has shown no significant bias exists, the results should be treated with some caution.

1.4.2 Profile of principals and teachers

Extensive data were collected from teachers and principals across all participating countries, allowing ACER to prepare a broad profile of some of the demographic characteristics of Australia's lower secondary teachers and make comparisons to teachers (Table 1.3) and principals (Table 1.4) in other countries.

TABLE 1.3 Profile of Australian teachers responding to TALIS 2018

Australian teacher profile	
Gender	62% of Australian lower secondary school teachers are female. This is significantly lower than the OECD average of 68%.
Age	The average age of the Australian teacher is 42.1 years. This is significantly lower than the OECD average of 44.1 years. Around 30% of Australian teachers are more than 50 years of age, which is lower than the OECD average.
Level of education	All Australian respondents hold a qualification at ISCED level 6 (undergraduate and postgraduate diploma or degree), or above. The TALIS average is 92.7%.

TABLE 1.4 Profile of Australian principals responding to TALIS 2018

Australian principal profile	
Gender	40% of Australian lower secondary school principals are female. The OECD average is 47%.
Age	In Australia, principals are, on average, 51 years old, similar to the average age of 52 across OECD countries and economies participating in TALIS. 19% of principals in Australia are aged 60 or above, which is the same as the OECD average of 20%.
Level of education	Australian principals are relatively highly qualified compared to the comparison countries, with all respondents having completed ISCED level 6 (undergraduate and postgraduate diploma or degree) or higher as their academic qualification.

1.5 Comparative groups

Throughout this report, comparisons will be made between Australia and the following:

- the OECD average (the average of participating countries who are members of the OECD)
- the TALIS average (the average of all participating countries and entities)
- a set of comparison countries and economies: Alberta (Canada), Estonia, Finland, Japan, and Singapore. These countries (reporting the sub-national entity of Alberta as a country for ease of reading) significantly outperformed Australia in PISA 2015 in all three domains: mathematical, reading and scientific literacy.

1.6 Interpreting the data

The TALIS data provide an important contribution to understanding the working conditions of teachers and the learning environment in schools. When interpreting the data presented in this report, care must be taken when making any comparisons between countries, or between groups of countries. Comparisons must be made with an understanding of the cultural, social or economic factors that underpin these responses in various countries.

In addition, TALIS data are based on self-reports by teachers and principals and therefore represent teachers' and principals' own sets of opinions, perspectives and beliefs on a given matter. As such, responses may be subjective and/or carry personal or cultural bias. In this way, these data differ from more objectively collected data, and therefore may differ from administrative data provided by national or state governments. In many respects, however, it is the very 'subjectiveness' of the TALIS responses that allow and provide powerful insights into the experiences and perspectives of teachers and principals in Australian schools.

As in the TALIS international reports, only differences that are statistically significant will be referred to in the text of the report. As TALIS is a sample study, the data are weighted and standard errors calculated in order to ascertain whether differences are indeed significant.

1.7 Report outline

The first volume, *Teachers and School Leaders as Lifelong Learners*, published in November 2019, explored teaching practices, the changing contexts for teaching and the knowledge and skills dimensions of professionalism for teachers and school leaders. This second volume, *Teachers and School Leaders as Valued Professionals*, explores the prestige and standing of the profession, the security, flexibility and reward structures of teaching and school leadership careers, the extent of professional collaboration and collegial relations within schools, and the degree of autonomy and leadership that teachers and school leaders have in their jobs.

The primary focus of these reports is the responses from lower-secondary teachers and school leaders. Data for primary teachers, where available and appropriate, are added in separate boxes.

The structure of this report mirrors that of the second volume of the TALIS 2018 International Report with a focus on results for Australia. It is organised around four substantive chapters:

Chapter 2 offers insights into teachers' and school leaders' perceptions of their working conditions and how they relate to the prestige and standing of the profession. To explore the prestige of the teaching profession, it examines to what extent teachers and school leaders consider their profession is valued in society. The chapter contrasts teachers' and school leaders' levels of job satisfaction with both their working environments and their profession and how these have changed over time. It also describes the level of stress teachers report experiencing in their work and explores the sources of stress. The chapter concludes by examining how teachers' perceptions of their working conditions are related to the risk of attrition.

Chapter 3 depicts the working conditions of teachers and school leaders, including appraisal processes, as well as their satisfaction with them. It begins by discussing job security among teachers, along with the prevalence of part-time work for teachers and principals, and teaching in multiple schools. The chapter then reviews the characteristics of formal teacher appraisal procedures across the TALIS countries and economies: the agents conducting appraisals, the methods used and the consequences of these evaluations. Finally, it discusses teachers' and principals' satisfaction with their salary and other working conditions.

Chapter 4 describes the different ways in which teachers collaborate in classrooms, schools and professional development. It explores how often teachers engage in collaborative activities and how that shapes the wider dimensions of the teaching profession, such as expertise and job satisfaction. It further examines teachers' collegiality, that is, the quality of interpersonal relationships between colleagues in schools, which provide the basis for a collaborative working environment. The second part of the chapter discusses feedback received by teachers, a unique form of collaboration, and examines how specific types of feedback can help teachers to improve their practices.

Chapter 5 describes the levels of autonomy and leadership in schools. It first identifies the tasks where schools have a larger role than out-of-school authorities and then compares the responsibilities of teachers and school leaders for each of these tasks. The chapter concludes by describing the prevalence of different forms of leadership for teachers and school leaders.

CHAPTER 2

Teachers and school leaders as valued professionals

Key Findings

- Higher proportions of Australian teachers (45%) and principals (66%) agreed that the teaching profession is valued in society, compared to the OECD averages (26% and 37% respectively). Male teachers and younger teachers are more likely to agree that the teaching profession is valued.
- While about one-third of teachers reported that they wondered whether they had chosen the right profession, very few teachers expressed regrets about becoming a teacher.
- Teachers with higher levels of satisfaction with teaching were less likely to report wanting to leave their current school.
- Australian teachers were more likely to report experiencing a lot of stress from their work, compared to the OECD average. Female teachers, younger teachers, teachers at government schools and teachers at schools with high concentrations of disadvantaged students reported higher rates of stress.
- The most common source of stress for Australian teachers and principals is having too much administrative work.
- Teachers who reported greater stress are more likely than colleagues with lower levels of stress to report that they will leave the profession in the next five years.

2.1 Introduction

Attracting, developing and retaining effective teachers is core to building a high-quality and effective teaching workforce (Ainley & Carstens, 2018). In Australia, the Alice Springs (Mparntwe) Agreeement identifies supporting quality teaching and leadership as a priority:

> Australian Governments commit to working with the education community to attract, develop, support and retain high-quality teachers, educators and leaders in Australia's education system. Excellence in teaching, educating and leadership will be recognised, celebrated and valued. (COAG, 2019, p. 11)

Perceptions about the prestige of the teaching profession are critical to attracting skilled and motivated teachers. TALIS 2018 asked teachers and principals about their level of agreement (*strongly disagree*, *disagree*, *agree*, *strongly agree*) on whether the teaching profession is valued in society.

In Australia, fewer than half (45%) of the teachers surveyed agreed or strongly agreed that the teaching profession is valued in society (Figure 2.1). While this compares well to the OECD average of 26 per cent, the perception of prestige was higher in Singapore (72%), Alberta (Canada) (63%) and Finland (58%). Of the other high-performing PISA countries, a little more than one-third (34%) of Japanese teachers agreed or strongly agreed that the teaching profession is valued, while Estonian teachers were around the OECD average (26%).

Whether teachers believe that their profession is valued in society varies significantly by gender in most countries. In Australia, 49 per cent of male teachers and 42 per cent of female teachers agreed that their profession was valued in society. In 32 TALIS countries and economies, a higher proportion of male teachers than female teachers agreed that teaching is valued. In a further 15 countries, there were no significant gender differences, while in just three participating countries female teachers agreed more than male teachers that their profession was valued. In four of the five high-performing PISA countries – Singapore, Alberta (Canada), Finland, and Japan – there were no gender differences in the perception of prestige. Only in Estonia was there a significant gender difference, with 31 per cent of male teachers compared to 25 per cent of female teachers agreeing.

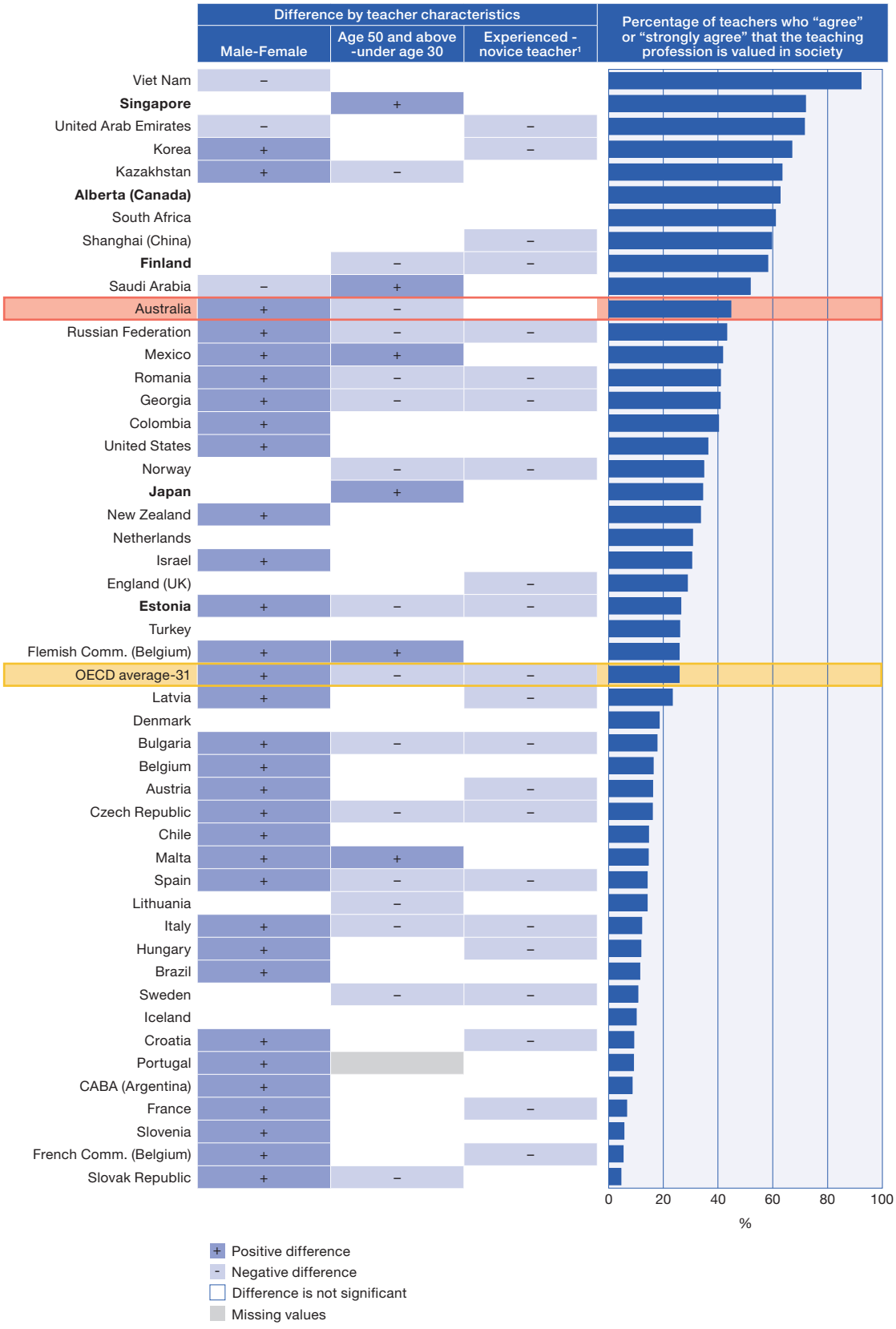
The OECD offer two possible reasons for these gender differences (OECD, 2020). One is that within occupations with a large proportion of females, such as teaching, males may have a special status and enjoy certain privileges. TALIS 2018 data provide some evidence supporting this, finding a higher proportion of males among school leaders than among teachers in nearly all countries and economies participating in TALIS, although school leaders are typically drawn from the ranks of teachers.

Another possible explanation is that, in female-dominated environments, schools may deliberately seek male teachers compared to female teachers in order to ensure a more equitable gender composition of the workforce. A special focus on male teachers may lead them to view the teaching profession as valued in society to a greater extent than their female counterparts. Moreover, TALIS 2018 shows that the difference between the proportion of male and female teachers holding a positive view of the profession tends to be larger in systems that are female-dominated. The correlation at the level of country/economies between the proportion of female teachers in the workforce and the difference of feeling valued in society between male and female teachers is positive among TALIS countries and economies (the linear correlation coefficient r is r=.41 among TALIS countries and economies).

In 16 of the TALIS 2018 countries, including Australia, a lower proportion of older (age 50 and above) teachers believe that their profession is valued compared to younger (age lower than 30) teachers (Figure 2.1). In Australia, 51 per cent of teachers under 30 years of age agreed or strongly agreed that their profession is valued compared to 44 per cent of teachers more than 50 years of age. There is no clear pattern across the high-performing PISA countries. In Alberta (Canada) there was no difference – 61 per cent of teachers under 30 years of age and 63 per cent of those over 50 years of age felt their profession was valued by the community. There were large significant differences in Estonia, where 38 per cent of teachers under 30 years of age, but only 21 per cent of those over 50 years of age agreeing, and in Singapore, with the reverse pattern – 70 per cent of teachers under 30 years of age and 87 per cent of those over 50 years of age believing that teaching had value in society. In Finland, it was younger teachers who held the more positive views, with 66 per cent of teachers under 30 years of age compared to 56 per cent of teachers more than 50 years of age agreeing, while in Japan, 34 per cent of teachers less than 30 years of age and 39 per cent of teachers more than 50 years of age agreed that teaching is a profession valued in society.

FIGURE 2.1 Teachers' views of how society values their profession, by teacher characteristics

Results based on responses of lower secondary teachers

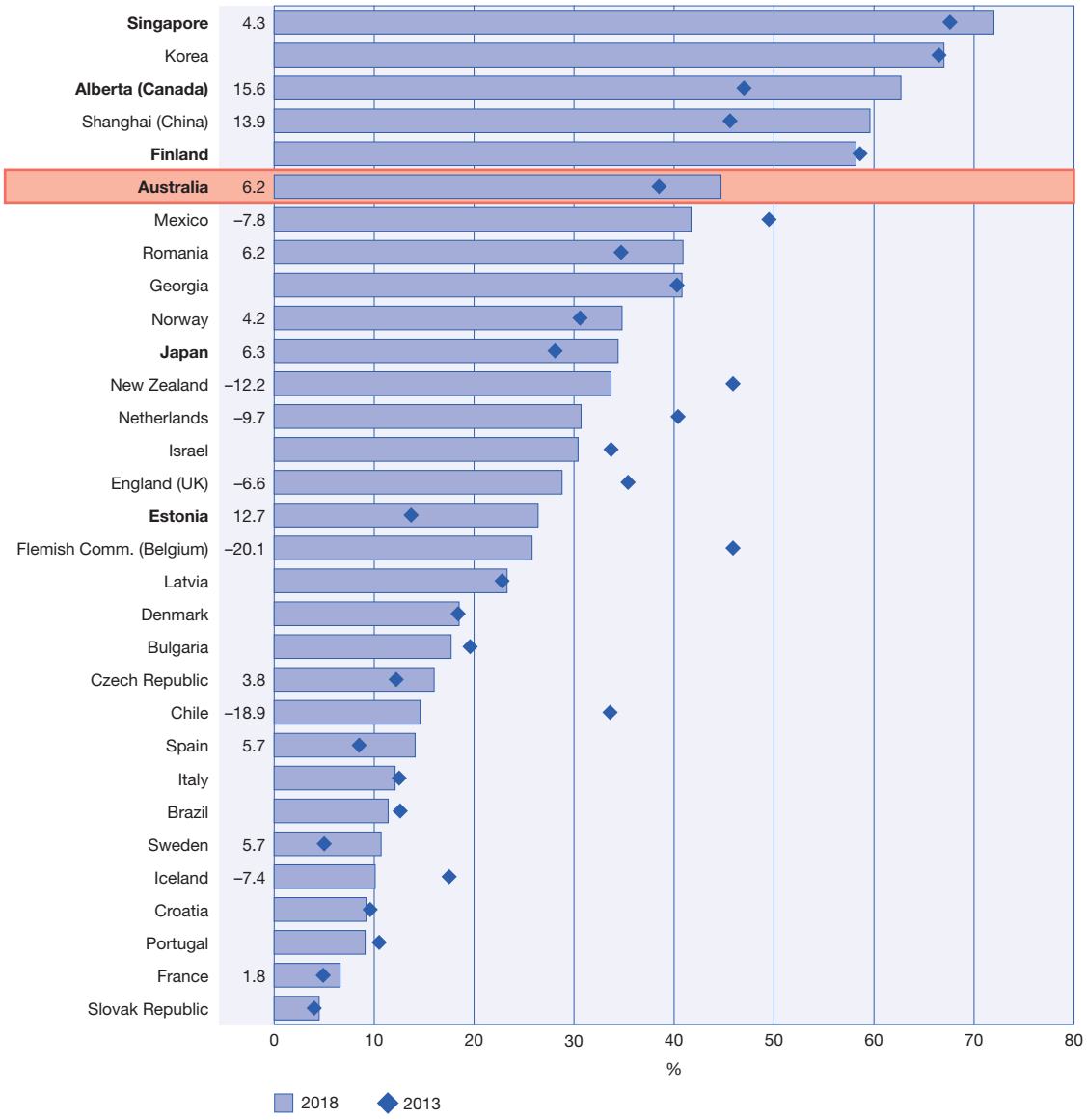


[1] Experienced teachers are teachers with more than 5 years of teaching.

Note: High-performing PISA countries in bold. For explanation refer to Reader's Guide.

Figure 2.2 shows changes in the perceived value of the teaching profession between TALIS 2013 and TALIS 2018 for countries that participated in both cycles. In Australia, there was a modest six percentage point increase in the percentage of teachers who think their profession is valued, from 39 per cent in TALIS 2013. The largest change among the participating high-performing PISA countries was in Alberta (Canada), increasing 16 percentage points from 47 per cent of teachers to 63 per cent of teachers agreeing or strongly agreeing that their profession was valued. Singaporean teachers built on their already high perceptions of the value of their profession, with an increase of four percentage points from 68 per cent in TALIS 2013 to 72 per cent agreement in TALIS 2018. Increasing from very low rates in TALIS 2013, Japanese teachers reported a modest increase of six percentage points, from 28 per cent agreeing or strongly agreeing that teaching was valued in society in TALIS 2013 to 34 per cent agreeing in TALIS 2018. Similarly, Estonian teachers' perceptions of the value of their work improved substantially from a low base, from 14 per cent agreeing in TALIS 2013 to 26 per cent agreeing in TALIS 2018.

FIGURE 2.2 Change in perceived societal value of teaching from 2013 to 2018
Results based on responses of lower secondary teachers



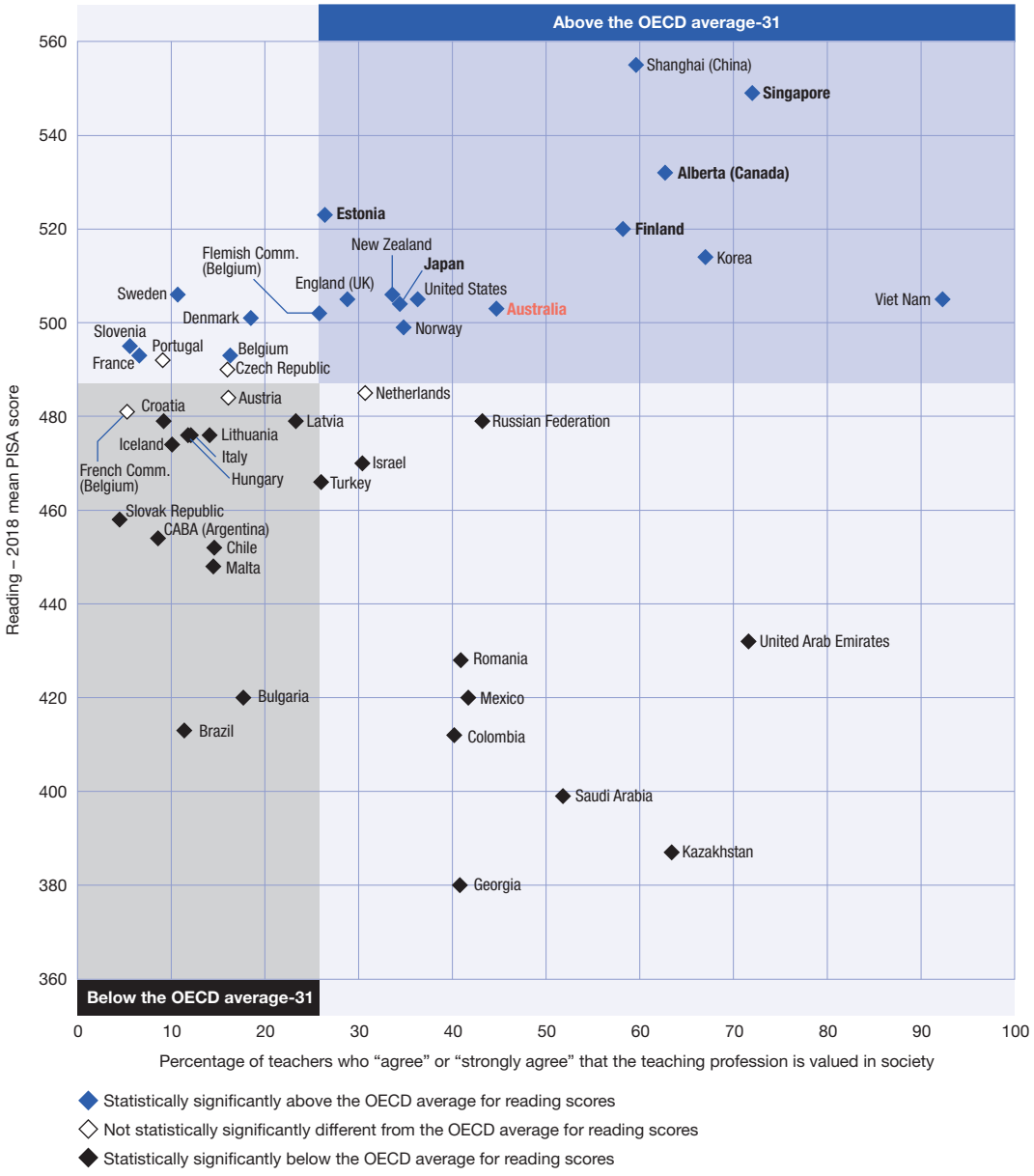
Notes: Only countries and economies with available data for 2013 and 2018 are shown. Statistically significant changes in perceived societal value of teaching between 2013 and 2018 (TALIS 2018 – TALIS 2013) are found next to the country/economy name. High-performing PISA countries in bold. For explanation refer to Reader's Guide.

Research evidence (Schleicher, 2018) has shown a system-level association between the performance of educational systems and teachers' perceptions of feeling valued in society. To test this association, a simple system-level correlation was conducted between the percentage of teachers feeling valued in society and the results of the Programme for International Student Assessment (PISA) in 2018. The average score in reading performance was selected, as it was the major domain in 2018. This relationship is shown in Figure 2.3.

The results of this analysis showed that there was a weak, positive relationship between the percentage of teachers feeling valued in society and the country's reading performance on PISA (the correlation coefficient was r = 0.09 across TALIS countries).

Australia and most of the high-performing PISA countries follow the pattern described; Estonia does not.

FIGURE 2.3 Teachers' perceived value of their profession and PISA 2018 reading scores
Results based on responses of lower secondary teachers and on PISA 2018 data



Notes: Only countries and economies with available data for TALIS 2018 and PISA 2018 are shown. In the case of Shanghai (China), PISA data is not available at the level of the subnational jurisdiction and PISA data for BSJZ China are used as proxy. High-performing PISA countries in bold. For explanation refer to Reader's Guide.

While the relationship between perceived prestige levels and achievement at the system level is weak, occupational prestige may have a positive association through its capacity to attract people to the profession. A proxy measure that the OECD use to understand the attractiveness of the teaching profession is whether teaching was considered a first choice as a career (defined as a paid job regarded as likely to form one's life work). On average across the OECD, after controlling for age, experience, type of contract (full-time or part-time), and other relevant factors, teachers who reported feeling valued in society are more likely to have decided on teaching as a first career choice (Appendix Table A2.1). This was the case for 27 TALIS countries, including Australia, Estonia, Finland, Japan and Singapore, but not Alberta (Canada). It may be that the prestige of the profession in the countries in which this relationship was found may motivate potential candidates to consider teaching as a viable career option at the beginning of their professional life. The importance of opting for teaching as a first career choice should not be disregarded, since it could also be an indicator of retention and performance of teachers. TALIS 2018 results Volume I showed that, for the majority of TALIS countries and economies, teachers who opted for teaching as a first-choice career were more likely to be satisfied with their job and to report higher levels of self-efficacy – see Figure 4.2 of the TALIS 2018 Australian report (Thomson & Hillman, 2019).

The proportion of teachers who reported feeling valued in society was also related to job satisfaction. Regression analysis (Table A2.2) found strong links between perceptions of occupational prestige and job satisfaction in Australia, across the OECD and on average across TALIS countries, and in each of the high-performing PISA countries.

BOX 2.1 Teachers' perceptions of the value of their profession, from primary to lower secondary education

Around 45 per cent of Australian lower secondary teachers believe that their profession is valued by society, and the proportion of primary teachers is lower still. Around 42 per cent of Australian primary teachers agree or strongly agree that their work is valued in society. This could be a reflection of the previously reported more negative view of primary teachers of the occupational prestige of their profession, and of there being a much greater proportion of female than male teachers at primary school level.

2.2 The perspective of principals on the value of the teaching profession

To explore differing perceptions within a school, principals were also asked to what extent they agree (*strongly agree*, *agree*, *disagree*, or *strongly disagree*) with the statement that the teaching profession is valued in society. Results are shown in Table 2.1 for Australia, the OECD[2] and TALIS averages, and for the high-performing PISA countries.

In Australia, 66 per cent of principals agreed or strongly agreed that the teaching profession is valued by society. This is significantly higher than the OECD and TALIS averages, and higher than the averages for Estonia and Japan, while significantly lower than for Alberta (Canada), Finland and Singapore.

There were very few differences evident among subgroups within the different countries, and none for Australian principals. On average across the OECD, male principals and principals with more than five years' experience reported higher levels of agreement that teaching is valued as a profession, compared to female principals and principals with less than five years' experience, respectively. In Finland, 65 per cent of new principals felt their profession was valued, compared with 85 per cent of more experienced principals. Conversely, in Singapore there was almost universal agreement between *all* principals that teaching was valued by society.

2 Note that because of response rates, Australia is not included in the OECD average. For further explanation see Chapter 1.

TABLE 2.1 Principals' views of the way society values the teaching profession, by principal characteristics

Results based on responses of lower secondary principals

	Percentage of principals who "agree" or "strongly agree" that the teaching profession is valued in society													
	Total		By gender				By age				By number of years of being a principal			
			Male		Female		Under age 45		Age 55 and above		Less than or equal to 5 years		More than 5 years	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia	66	5.5	66	7.6	65	8.1	66	16.7	65	8.0	59	8.6	73	5.6
OECD average-30	37	0.8	**40**	1.1	35	1.4	34	2.0	38	1.3	34	1.3	**39**	1.1
TALIS average-47	44	0.6	**46**	0.9	43	1.0	42	1.5	45	1.0	41	0.9	**46**	0.8
High-performing PISA countries														
Alberta (Canada)	78	6.2	84	6.5	64	10.5	78	7.2	95	5.6	72	7.3	82	6.9
Estonia	40	3.7	40	5.4	41	5.0	50	10.9	31	4.6	49	7.6	36	4.1
Finland	79	3.6	**87**	4.2	70	6.0	64	10.0	80	6.6	65	8.4	**85**	3.6
Japan	45	4.2	46	4.4	42	15.2	c	c	45	4.3	42	5.2	52	6.8
Singapore	98	0.9	99	1.0	98	1.6	98	2.3	98	1.5	100	0.0	98	1.3

Notes: Statistically significant differences between groups shown with the higher value bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

2.3 Job satisfaction with the current working environment and the profession

This section of the report examines the responses of teachers and principals to questions about their level of satisfaction with their current working environment and their profession.

Job satisfaction is the sense of fulfilment and gratification teachers get from working (Ainley & Carstens, 2018). The OECD argues that there is a positive relationship between job satisfaction and teachers' performance, which plays a key role in teachers' attitudes, efforts and self-efficacy or confidence (OECD, 2019). The OECD also suggests that job satisfaction is related to teacher retention, attrition, absenteeism, burnout, commitment to educational goals and job performance of teachers.

Job satisfaction can be divided into two areas: satisfaction with the current work environment and satisfaction with the profession as a whole. TALIS 2018 measures job satisfaction among teachers and principals by asking their level of agreement (*strongly disagree*, *disagree*, *agree*, *strongly agree*) with a set of statements covering both positive and negative aspects of their current work environment and their profession.

2.3.1 Teachers' satisfaction with their profession and current work environment

Teachers satisfaction with the profession overall was assessed through their responses to four indicators: "the advantages of being a teacher clearly outweigh the disadvantages", "if I could decide again, I would still choose to work as a teacher", "I regret that I decided to become a teacher", and "I wonder whether it would have been better to choose another profession". Figure 2.4 shows the percentage of teachers who agreed or strongly agreed with each of the statements for Australia and the average for OECD countries.

The vast majority of teachers in Australia (88%) agreed that the advantages of being a teacher clearly outweigh the disadvantages. This is significantly higher than the OECD average of 76 per cent, and is among the high end of the high-performing PISA countries, comparing well with Alberta (Canada) (90%) and Finland (92%).

Most Australian teachers (83%) also said that they would still choose to work as a teacher if given the choice again, again high compared to an OECD average of 76 per cent, and similar to the most positive of the high-performing PISA countries (Alberta (Canada) 86% and Singapore 82%).

While the majority of teachers (67%) disagreed or strongly disagreed with the statement "I wonder whether it would have been better to choose another profession", this still leaves one-third considering whether the opposite is true.

Table 2.2 shows on average, in Australia and across the OECD, male teachers were more likely than female teachers to consider they may have chosen the wrong profession. In Australia, no significant difference was found between younger and older teachers, or between less and more experienced teachers. However across the OECD on average, teachers who were younger than 30 years were more likely to wonder if they had made the right choice of career. As a stark contrast, in Singapore, 59 per cent of teachers aged less than 30 years and 25 per cent of those older than 50 years wondered this.

A higher share of teachers at publicly managed schools than in privately managed schools agreed to some extent with this statement. The OECD conjectures this may be due to differences in working conditions between the two systems that could affect the professional satisfaction of teachers. Similarly, a higher share of teachers teaching with higher concentrations of disadvantaged students than those with lower concentrations reported that they wondered whether it would have been better to choose another profession.

Despite one-third of teachers wondering if they should have chosen another profession, very few had regrets about becoming a teacher. Just six per cent of Australian teachers reported that they agreed or strongly agreed with this statement, relative to the OECD average of 9 per cent.

TABLE 2.2 Teachers wondering whether it would have been better to choose another profession, by teacher and school characteristics (Australia and OECD average)

Results based on responses of lower secondary teachers

	Percentage of teachers who "agree" or "strongly agree" with the statement "I wonder whether it would have been better to choose another profession"							
	Australia				OECD average			
			Difference				Difference	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Gender								
Male	36	1.6	**5**	2.0	35	0.4	**2**	0.4
Female	31	1.2			33	0.3		
Age								
< 30 years	33	2.4	3	3.1	35	0.7	**6**	0.7
≥ 50 years	30	1.7			30	0.3		
Years teaching								
≤ 5 years	33	2.0	0	2.3	32	0.5	**2**	0.5
>5 years	33	1.2			34	0.2		
School type								
Publicly managed[1]	36	1.3	**7**	2.2	35	0.2	**4**	0.7
Privately managed[2]	30	1.7			30	0.7		
By concentration of socioeconomically disadvantaged students[3]								
≤ 30%	31	1.2	**7**	2.6	34	0.2	0	0.6
> 30%	38	2.2			34	0.6		
By concentration of immigrant students[4]								
≤ 10%	32	1.5	2	2.2	33	0.3	0	0.7
> 10%	34	1.5			34	0.6		
By concentration of special needs students[5]								
≤ 10%	33	1.4	0	2.5	34	0.3	0	0.5
> 10%	33	1.9			34	0.4		

[1] A publicly managed school is a school whose principal reported that it is managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise. In the Principal Questionnaire, this question does not make any reference to the source of the school's funding which is reported in the preceding question.

[2] A privately managed school is a school whose principal reported that it is managed by a non-governmental organisation (e.g. a church, trade union, business or other private institution). In the Principal Questionnaire, this question does not make any reference to the source of the school's funding, which is reported in the preceding question. In some countries, the privately managed schools category includes schools that receive significant funding from the government (government-dependent private schools).

[3] "Socioeconomically disadvantaged students" refers to students living in homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care.

[4] "Immigrant students" refers to "students who are immigrants or with a migrant background", as reported by the school principal. An "immigrant student" is one who was born outside the country. A "student with a migrant background" has parents who were both born outside the country.

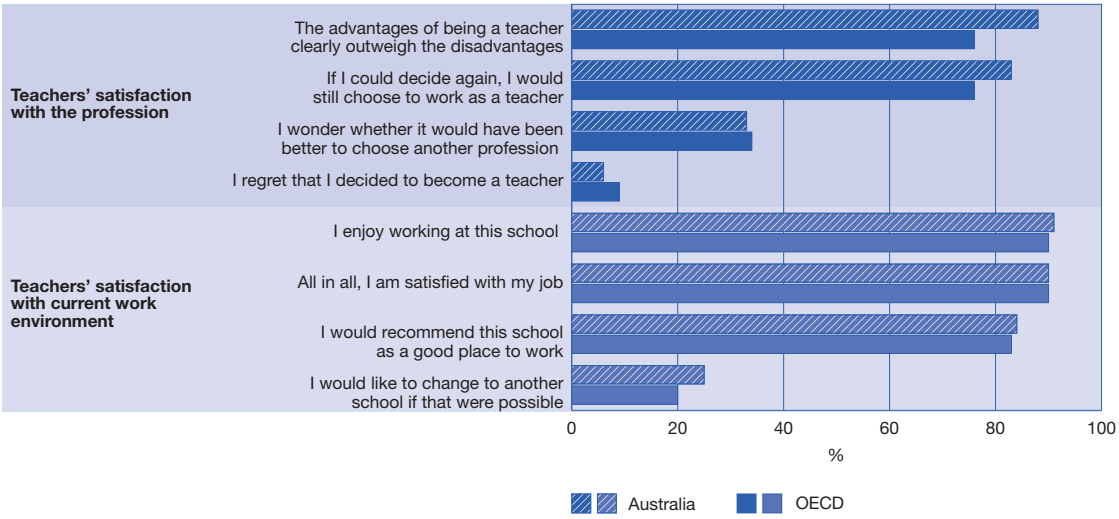
[5] Students with special needs are those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged.

Notes: Statistically significant differences in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

Figure 2.4 also shows teachers' level of agreement with several statements regarding their current work environment. Overwhelmingly, teachers reported being satisfied with their job and enjoying working at their school. More than 90 per cent of teachers in Australia and on average across the OECD reported that they agree or strongly agree with these statements. More than 80 per cent agreed that they would recommend their current school as a good place to work. However, 25 per cent of Australian teachers and 20 per cent of teachers on average across the OECD reported that they would like to change to another school if that were possible. This was particularly the case for teachers in schools with high concentrations of socioeconomically disadvantaged students, where 35 per cent indicated they wanted to change schools compared to 23 per cent of those in schools with less disadvantage.

FIGURE 2.4 Teachers' satisfaction with their profession and current work environment

Percentage of lower secondary teachers who agree *or* strongly agree *with each of the statements (Australia and OECD average)*



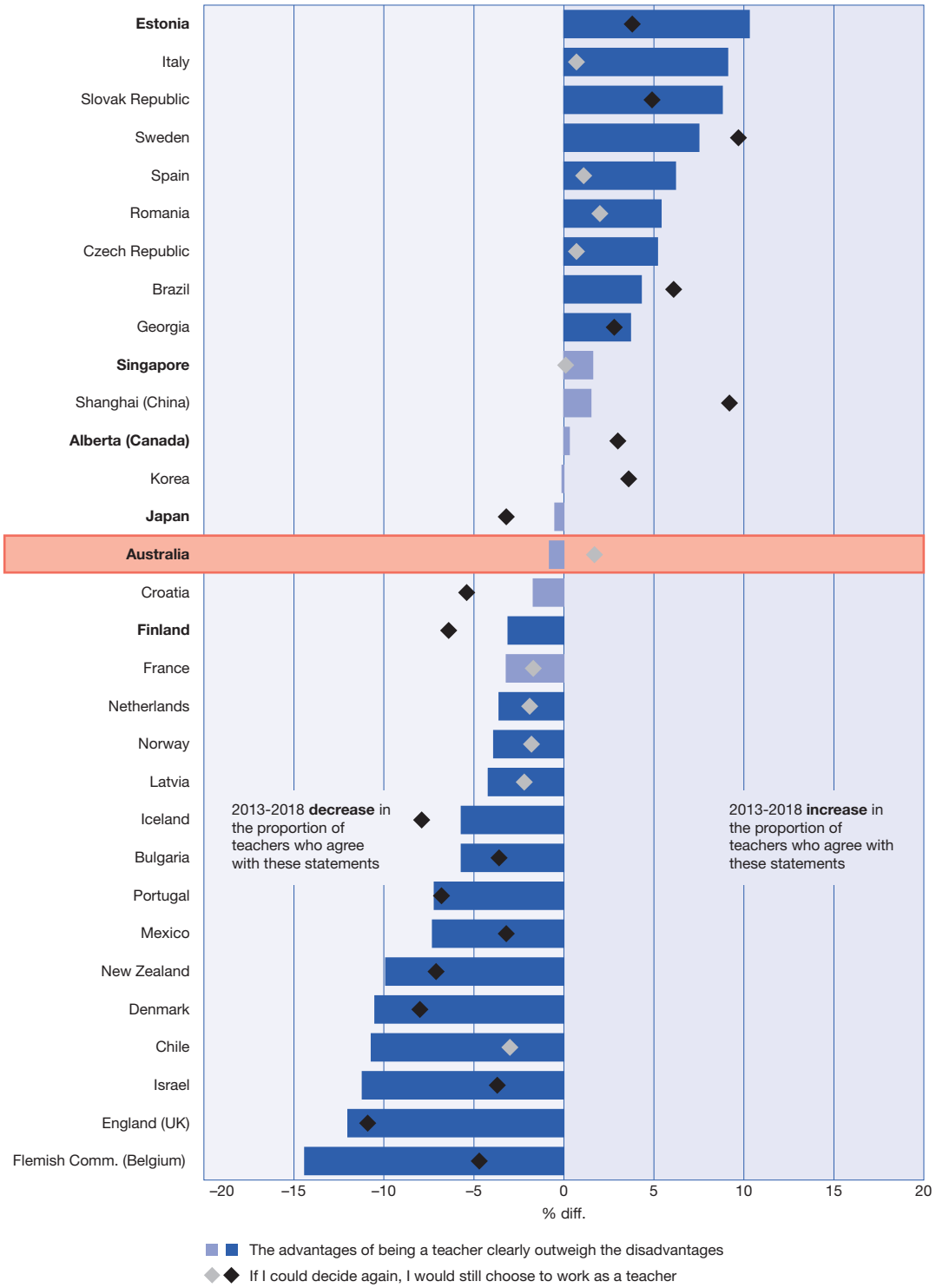
To further understand what is behind teachers' responses to these questions, TALIS 2018 ran a logistic regression analysis between teachers' reported willingness to change schools and their satisfaction with the profession and various demographic characteristics. On average across the OECD, teachers who wish to leave their school are less satisfied with the profession, did not choose teaching as a first choice career, are slightly younger and less experienced in their current school, are more likely to work full-time and to report teaching in a target class with a slightly higher concentration of disadvantaged students, low academic achievers and students with behavioural problems. The findings of the regression for Australian teachers were very similar, with the exception that neither age nor experience were significantly related to teachers' intent to leave. A consistent factor found across all participating countries was that teachers with higher levels of satisfaction with teaching were less likely to report wanting to leave their school.

Figure 2.5 shows the changes in satisfaction with the profession across all countries included in both surveys, for the two positive statements: "the advantages of being a teacher clearly outweigh the disadvantages" and "if I could decide again, I would still choose to work as a teacher". In 14 countries and economies, there was a significant decrease in the percentage of teachers agreeing (*agree* or *strongly agree*) that the "the advantages of being a teacher clearly outweigh the disadvantages", while the opposite trend is observed for nine countries and economies. In Australia, and also in Singapore, Japan and Alberta (Canada), there was no change in the level of agreement with this statement, and a small (three percentage points) decrease for teachers in Finland. In Estonia, by comparison, there was an increase of 10 percentage points in the proportion of teachers agreeing with this statement.

Similarly, a decrease is observed in 12 countries with respect to the indicator "if I could decide again, I would still choose to work as a teacher", while the opposite trend is observed for seven countries. Again, no changes were observed for Australian or Singaporean teachers, while Estonian teachers reported a five percentage point increase. Of the other PISA high-performing countries, there was a small increase in the proportion of teachers agreeing with the statement in Alberta (Canada), and decreases in Japan and Finland.

FIGURE 2.5 Change in teachers' satisfaction with the profession from 2013 to 2018 – positive statements

Percentage point differences between 2013 and 2018 in the share of lower secondary teachers who agree *or* strongly agree *with these statements*



Notes: Only countries and economies with available data for 2013 and 2018 are shown. Statistically significant values are marked in a darker tone. High-performing PISA countries in bold. For explanation refer to Reader's Guide.

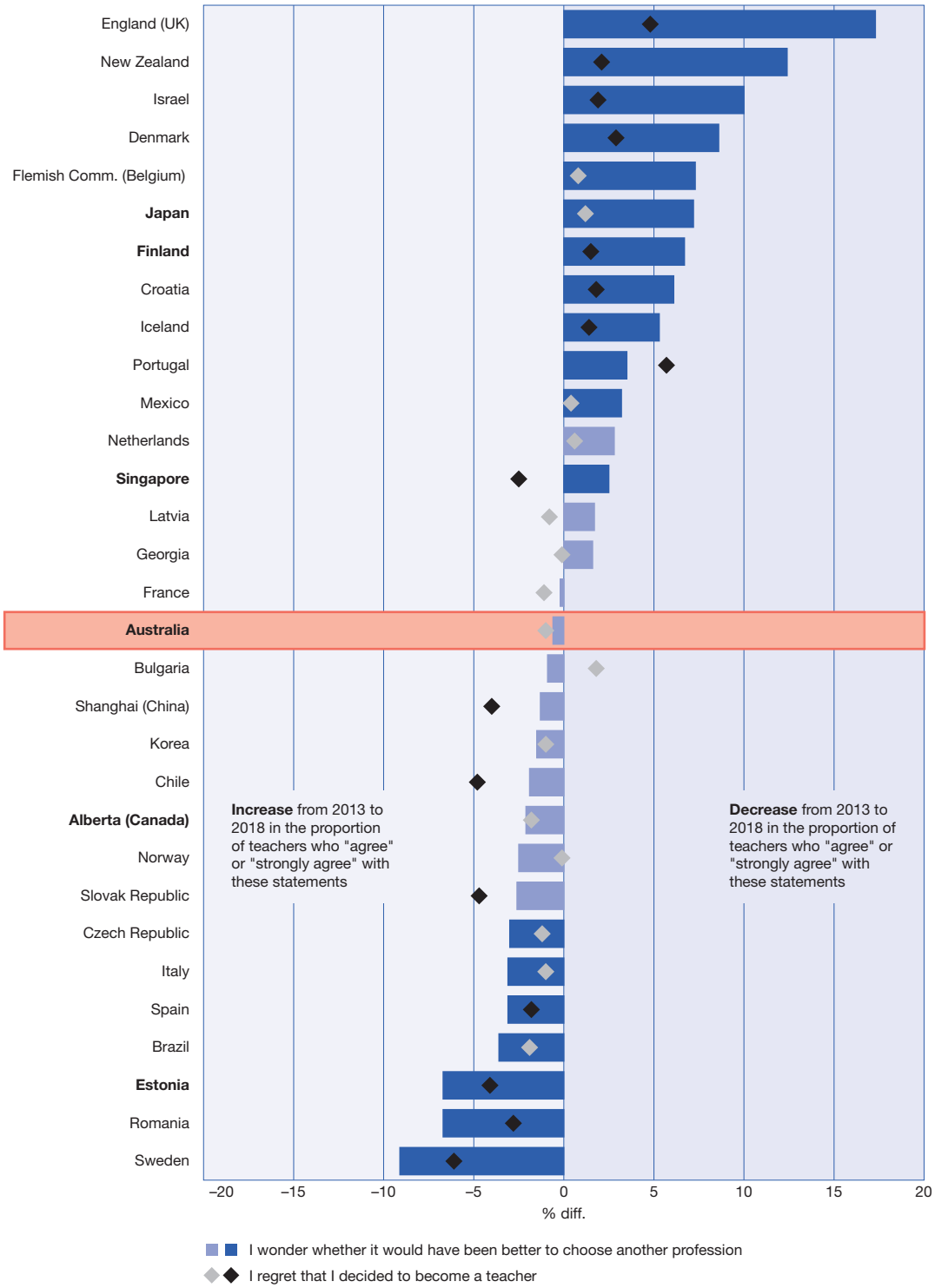
Figure 2.6 presents the changes from 2013 to 2018 for the two negative statements associated with teacher satisfaction: “I regret that I decided to become a teacher” and “I wonder whether it would have been better to choose another profession”. The percentage of teachers reporting that they regret having become a teacher increased significantly in eight countries and decreased in a further eight. There has also been an increase in 12 systems in the percentage of teachers wondering whether if it would have been better to choose another profession, while a decrease in this proportion was observed in seven systems. In Australia, there have been no changes in the level of agreement with either statement from 2013 to 2018.

Estonian teachers reported a significant increase for both of the positive statements: “The advantages of being a teacher clearly outweigh the disadvantages” and “If I could decide again, I would still choose to work as a teacher”, along with a significant decrease in both negative statements (“I regret that I decided to become a teacher” and “I wonder whether it would have been better to choose another profession”). The OECD suggest this is due to strong moves by the Estonian government to focus on ensuring teachers’ satisfaction and promoting their image in society. Measures taken include boosting salaries, incorporating incentives to motivate professional development, and through education awards aimed at expanding social recognition of education personnel.

Over the same period, Finland showed a significant decrease for both positive statements and an increase for both negative statements.

FIGURE 2.6 Change in teachers' satisfaction with the profession from 2013 to 2018 – negative statements

Percentage point differences between 2013 and 2018 in the share of lower secondary teachers who agree *or* strongly agree *with these statements*



Notes: Only countries and economies with available data for 2013 and 2018 are shown. Statistically significant values are marked in a darker tone. High-performing PISA countries in bold. For explanation refer to Reader's Guide.

The OECD examined whether the variation in job satisfaction among teachers was related to the school where teachers work (for example, the school type, culture of the school, administrative procedures of the school, etc.) or to individual teacher characteristics (for example, teacher qualifications or teacher experience). TALIS 2018 estimated the amount of variance in teachers' responses to the items on satisfaction with the current work environment and to the items on satisfaction with the profession accounted for by differences between schools.

Across the OECD on average, for both satisfaction with the current work environment and satisfaction with the profession, only a small percentage of the total variance comes from differences between schools. Variance attributable to school factors is particularly low for satisfaction with the profession, since only four per cent is accounted for by school-level differences (4.6% in Australia). In other words, teachers' satisfaction with the profession does not vary substantially from school to school. These results signal that efforts to change the level of teachers' satisfaction with the profession are more likely to have an impact if they are directed towards individual teachers rather than towards schools.

Satisfaction with the current work environment, however, is more dependent on school factors, given that 13 per cent of the variance, on average across the OECD, is accounted for by school differences. These results are not particularly surprising. Items on satisfaction with the current work environment measure elements strongly related to the school (hence relatively higher variance at the school level), while the scale for satisfaction with the profession measures elements related to the individual professional trajectory and aspirations of teachers (hence relatively lower variance at the school level). In other words, school characteristics, such as school composition or resources, may play a slightly greater role in determining satisfaction with the current work environment than for satisfaction with the profession.

In Australia, however, a greater proportion of the variance in teachers' satisfaction with their current work environment (17.9%) is accounted for by school factors. This is the sixth largest of all TALIS countries and economies, behind Brazil, Bulgaria, Korea, New Zealand, South Africa and Turkey. The variance among the PISA high-performing countries ranges from 10 per cent in Finland to 14.7 per cent in Alberta (Canada). The OECD suggests that to enhance satisfaction with the current work environment, systems with high levels of variance accounted for by school differences might find it more effective to intervene at the school level, rather than at the teacher level.

BOX 2.2 Teachers' satisfaction with their current work environment and the teaching profession, from primary to lower secondary education

Australian primary teachers were asked the same questions about their work environment and the profession. Overall, responses about satisfaction with their profession for primary teachers were almost the same as those provided by secondary teachers. The only item on which there was a significant difference between the groups was on the item "I wonder whether it would have been better to choose another profession", with which 33 per cent of secondary teachers and 30 per cent of primary teachers agreed (*agreed* and *strongly agreed*).

For the items on satisfaction with their work environment, primary teachers reported higher agreement with three of the items. Primary teachers more often said that they would *not* like to change to another school if possible (78% of primary teachers compared to 75% of secondary teachers), they more often agreed that they would recommend the school as a good school (88% of primary and 84% of secondary teachers), and also that they were satisfied with their performance in this school (96% of primary and 94% of secondary teachers).

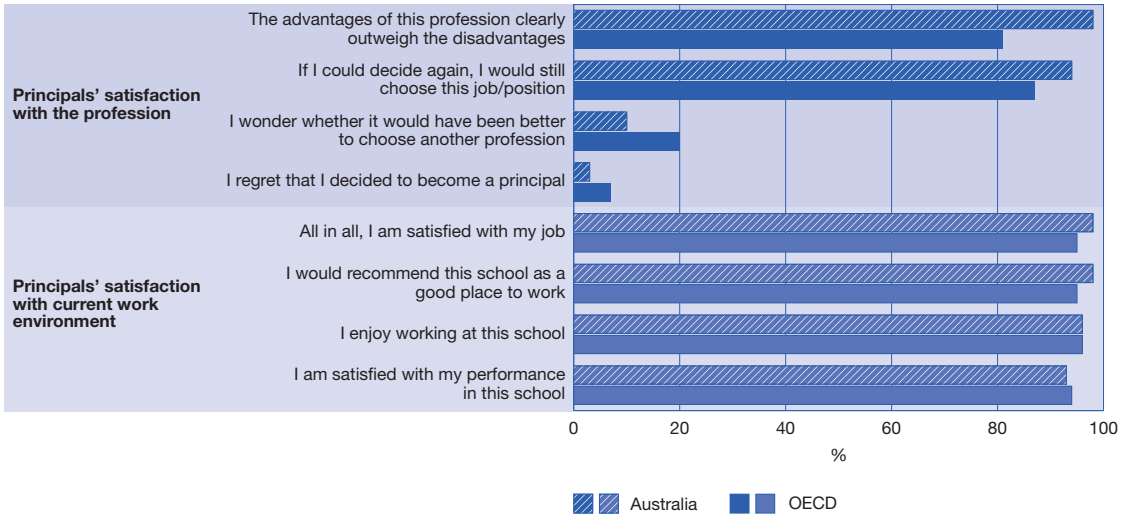
2.3.2 Job satisfaction among principals

Principals' reported job satisfaction is high in Australia and across the OECD. Over 90 per cent of Australian principals agree or strongly agree with all of the positive statements: "I enjoy working at this school" (Australia 96%, OECD 96%); "all in all, I am satisfied with my job" (Australia 98%, OECD 95%)"; "I would recommend this school as a good place to work" (Australia 98%, OECD 95%); and "I am satisfied with my performance in this school" (Australia 93%, OECD 94%) (Figure 2.7). In the majority of countries and economies with available data, there were no significant changes for principals in the indicators of satisfaction with the current work environment between 2013 and 2018.

Similarly, at least 90 per cent of Australian principals and at least 80 per cent of those across the OECD responded positively to each of the four indicators of satisfaction with the profession: "if I could decide again, I would still choose this job/position" (Australia 94%, OECD 87%); "the advantages of this profession clearly outweigh the disadvantages" (Australia 98%, OECD 81%); "I wonder whether it would have been better to choose another profession" (Australia 10%, OECD 20%); and "I regret that I decided to become a principal" (Australia 3%, OECD 7%) (Figure 2.7). Of the PISA high-performing countries, only Estonia and Singapore had at least 80 per cent of principals expressing satisfaction on these four indicators (by agreeing with positive statements and disagreeing with negative statements). In Alberta (Canada), more than 20 per cent of principals reported regretting their decision to become principals.

FIGURE 2.7 Principals' satisfaction with their profession and current work environment

Percentage of lower secondary principals who agree *or* strongly agree *with the following statements (Australia and OECD average)*



BOX 2.3 Principals' satisfaction with their current work environment and the teaching profession, from primary to lower secondary education

Significant differences between these satisfaction indicators could reflect not only different work environments, but also different principal profiles with different career aspirations across educational levels.

Satisfaction with current work environment

In the case of principals, there is practically no significant variation between primary and secondary teachers regarding satisfaction with their work environment. The only significant difference was on the item "I would like to change to another school if that were possible", to which 22 per cent of primary principals compared to nine per cent of secondary principals expressed agreement. However, 94 per cent of primary principals agreed that they "enjoy working at this school", and 95 per cent agreed "All in all, I am satisfied with my job".

Satisfaction with the profession

Like satisfaction with their work environment, there is practically no significant variation across educational levels in principals' satisfaction with their profession. The only item on which there was a significant difference between Australian primary and secondary principals was on the item "I wonder whether it would have been better to choose another profession", with which 25 per cent of primary principals agreed or strongly agreed, compared to 10 per cent of secondary principals. Given that, however, 90 per cent of primary principals also agreed with the statement "If I could decide again, I would still choose this job/position" and just five per cent regretted deciding to become a principal.

2.4 Sources and levels of stress among teachers and school leaders

Work-related stress can be viewed as an imbalance between work demands and environmental or personal resources at work. Workers can experience stress when the work demands placed on them do not match their support at work, their knowledge and skills or ability to cope at work. The indicators used in TALIS are restricted to stress reactions from the workplace and occupation and do not include general anxiety or life-event stress. Research has associated high levels of stress with lower self-efficacy for teaching, lower job satisfaction, lower commitment, burnout and teachers leaving the profession (for references see OECD, 2020).

This section describes the levels of stress reported by teachers and what they report as their main sources of stress. It then explores the relationships between stress levels and certain characteristics of working conditions, with specific emphasis on working hours and administrative workload, which teachers most often report as sources of stress.

2.4.1 Teachers' stress levels

TALIS 2018 asked teachers for the first time how much they experience stress in their work (*not at all*; *to some extent*; *quite a bit*; *a lot*). In Australia, 24 per cent of teachers reported experiencing a lot of stress in their work (Figure 2.8), compared to an average of 18 per cent across the OECD.

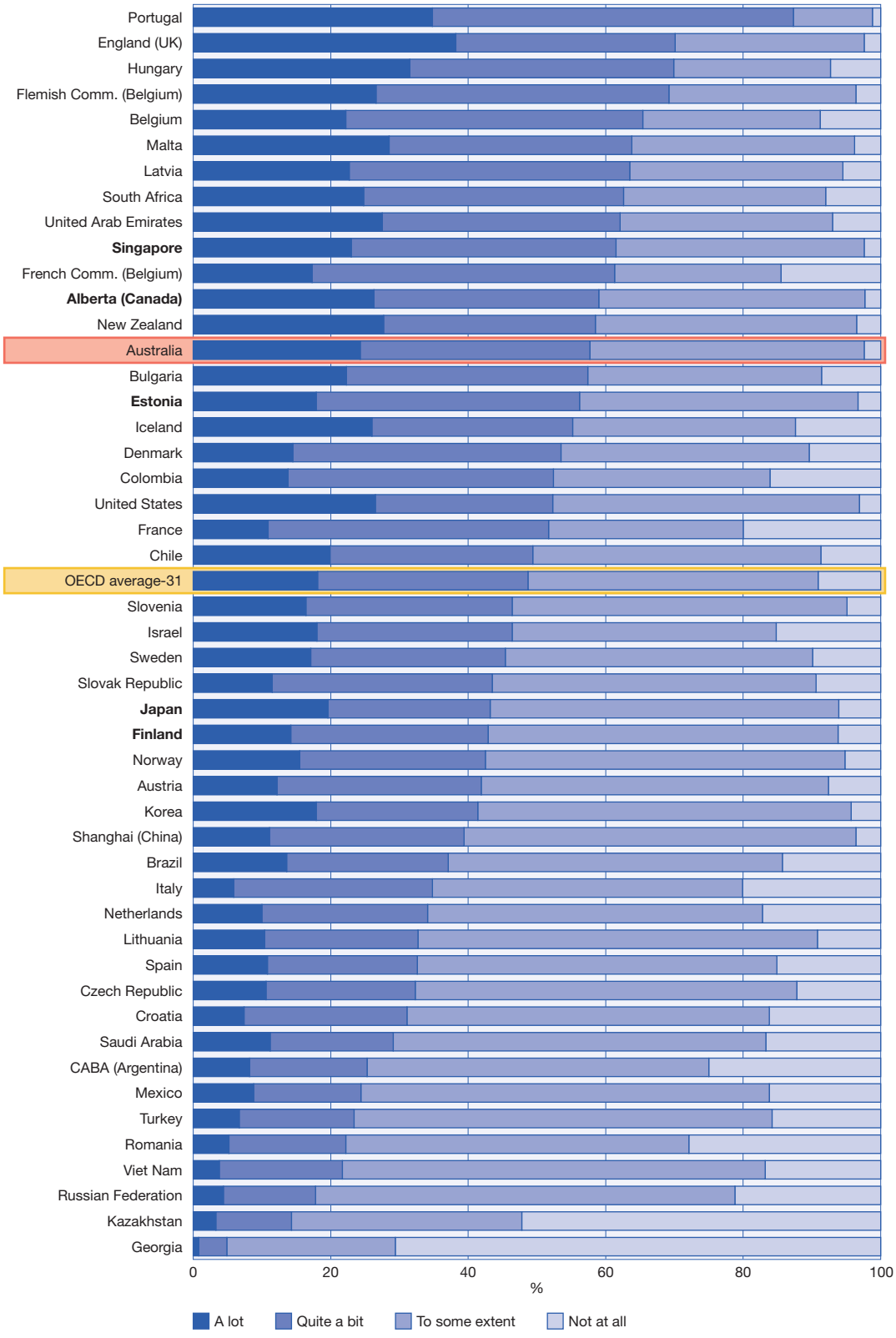
Of the PISA high-performing countries, teachers in Alberta (Canada) reported the highest levels of stress, with 26 per cent reporting experiencing stress *a lot*. In contrast, just 14 per cent of Finland's teachers reported experiencing a lot of stress.

Conversely, very few teachers in Singapore (2%), Alberta (Canada) (2%), Australia (2%) and Estonia (3%) said they experience no stress, compared to an OECD average of nine per cent, and around six per cent of teachers in both Japan and Finland.

Among Australian teachers, a higher percentage of female teachers (26%) than male teachers (20%), teachers under 30 (30%) compared to those over 50 (19%), teachers at publicly managed schools (28%) compared to those at privately managed schools (20%) and teachers teaching at schools with higher concentrations of disadvantaged students (31%) compared to those teaching at schools with lower concentrations of disadvantaged students (21%) reported experiencing stress in their work *a lot*. The reported difference in perceived stress between teachers working in schools with high compared to low proportions of disadvantaged students is by far the largest across the OECD.

FIGURE 2.8 Teachers' experience of stress in their work

Percentage of lower secondary teachers reporting the extent of stress in their work



Note: High-performing PISA countries in bold. For explanation refer to Reader's Guide.

TALIS also asked teachers for their perception of the extent to which their job negatively affects their mental and physical health (*not at all*; *to some extent*; *quite a bit*; *a lot*) (Table 2.3). On average across the OECD, seven per cent of teachers reported that their job negatively impacts their mental health a lot, while six per cent reported that it negatively impacts their physical health a lot. A slightly higher proportion of Australian teachers (9%) reported that their job negatively impacts their mental health, while six per cent reported that it negatively impacts their physical health.

It is argued (OECD, 2020) that an important element of work-life balance is having the ability to unwind after work hours or being able to switch off from work responsibilities. In Australia, only eight per cent of teachers consider that their work never leaves room for their personal life, compared to the OECD average of six per cent. Teachers in Estonia and Finland are less likely to report that their work never leaves time for their personal life (4% and 3% respectively), and that their job impacts their mental health a lot (5% and 4% respectively) and their physical health a lot (3% for each). In contrast, 16 per cent of Japanese teachers reported not having time for their personal life, nine per cent reported their work having a negative impact on their mental health and eight per cent on their physical health.

TABLE 2.3 Teachers' experiences of stress
Results based on responses of lower secondary teachers

	Percentage of teachers reporting the following occurrences in their work															
	I experience stress in my work								My job leaves me time for my personal life							
	Not at all		To some extent		Quite a bit		A lot		Not at all		To some extent		Quite a bit		A lot	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia	2	0.3	40	1.1	33	1.0	24	0.9	8	0.6	59	1.1	28	1.2	6	0.6
OECD average-31	9	0.2	42	0.2	31	0.2	18	0.2	6	0.1	44	0.2	39	0.2	11	0.1
TALIS average-48	12	0.1	43	0.2	28	0.2	16	0.1	8	0.1	47	0.2	36	0.2	9	0.1
High-performing PISA countries																
Alberta (Canada)	2	0.5	39	2.4	33	2.7	26	1.7	8	1.1	65	2.1	24	1.7	3	0.7
Estonia	3	0.4	40	1.0	38	1.0	18	0.7	4	0.5	47	1.0	41	1.1	7	0.6
Finland	6	0.5	51	1.1	29	0.9	14	0.8	3	0.4	42	1.3	44	1.3	11	0.7
Japan	6	0.5	51	1.0	24	0.8	20	0.9	16	0.7	62	0.9	17	0.8	5	0.4
Singapore	2	0.3	36	0.8	39	0.9	23	0.7	8	0.5	62	0.9	26	0.9	4	0.4

TABLE 2.3 (ctd.)

	Percentage of teachers reporting the following occurrences in their work (ctd.)															
	My job negatively impacts my mental health								My job negatively impacts my physical health							
	Not at all		To some extent		Quite a bit		A lot		Not at all		To some extent		Quite a bit		A lot	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia	26	0.9	50	1.1	15	0.7	9	0.6	35	1.1	45	1.0	14	0.7	6	0.5
OECD average-31	34	0.2	42	0.2	16	0.2	7	0.1	40	0.2	40	0.2	15	0.1	6	0.1
TALIS average-48	37	0.2	41	0.2	15	0.1	7	0.1	40	0.2	40	0.2	14	0.1	6	0.1
High-performing PISA countries																
Alberta (Canada)	24	2.2	52	2.8	16	1.4	8	1.0	31	1.7	50	1.8	13	1.4	6	0.8
Estonia	30	0.9	51	0.9	14	0.6	5	0.5	41	0.9	45	0.9	11	0.6	3	0.4
Finland	43	1.3	44	1.0	9	0.7	4	0.5	54	1.3	36	1.0	6	0.5	3	0.4
Japan	26	0.9	50	0.9	15	0.6	9	0.5	30	1.0	49	0.9	13	0.7	8	0.5
Singapore	31	0.8	45	1.0	17	0.7	7	0.4	27	0.8	47	0.9	19	0.8	7	0.5

Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide

2.4.2 How does teachers' stress relate to their work?

To answer this question, the four questions on indicators of stress (the extent teachers experience stress in their work; if work leaves room for personal time; the impact on their mental health; and the impact on their physical health) were grouped into a scale of teachers' wellbeing and stress. Regression results (Table 2.4) show a significant negative association between teachers' wellbeing and stress and their reported self-efficacy in most countries. In other words, teachers with higher levels of stress also tend to report lower levels of self-efficacy. This relationship holds true for Australia and all of the high-performing PISA countries other than Alberta (Canada) and Estonia. The results suggest that high levels of stress could be undermining teachers' confidence to perform effectively in the classroom. Alternatively, teachers who are less confident may experience greater stress as a result. Nevertheless, caution is recommended in interpreting these results, since the explanatory power of this model is limited (the coefficients of determination R^2 are low).

TABLE 2.4 Relationship between teachers' self-efficacy and workplace wellbeing and stress
Results of linear regression based on responses of lower secondary teachers

	Index of self-efficacy[1]																
	Dependent on:																
	Index of workplace wellbeing and stress[2]		Female[3]		Age[4]		Years of experience as a teacher at current school[4]		Working full-time[5]		Classroom composition: share of low achiever students[6]		Classroom composition: share of students with behavioural problems[6]		Classroom composition: share of students from socio economically dis-advantaged homes[6]		
	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	R^2
Australia	**-0.05**	0.02	**0.55**	0.09	**0.02**	0.00	**0.02**	0.01	**0.51**	0.11	**-0.01**	0.00	0.00	0.00	0.00	0.00	0.05
OECD average-31	**-0.10**	0.00	**0.25**	0.02	**0.01**	0.00	**0.01**	0.00	**0.35**	0.03	**-0.01**	0.00	**0.00**	0.00	**0.01**	0.00	0.04
TALIS average-48	**-0.10**	0.00	**0.26**	0.02	**0.01**	0.00	**0.01**	0.00	**0.32**	0.02	**-0.01**	0.00	**0.00**	0.00	**0.01**	0.00	0.05
High-performing PISA countries																	
Alberta (Canada)	-0.03	0.04	**0.37**	0.15	**0.04**	0.01	-0.01	0.01	0.49	0.27	-0.01	0.01	0.00	0.01	**0.01**	0.01	0.06
Estonia	-0.03	0.03	**0.40**	0.09	0.00	0.00	0.00	0.00	**0.21**	0.08	0.00	0.00	**0.01**	0.00	0.00	0.00	0.01
Finland	**-0.17**	0.03	**0.47**	0.11	0.00	0.01	0.01	0.01	**0.41**	0.17	0.01	0.00	0.00	0.00	**0.01**	0.00	0.03
Japan	**-0.04**	0.02	**-0.41**	0.07	**0.03**	0.00	0.01	0.01	**0.40**	0.12	0.00	0.00	-0.01	0.00	**0.01**	0.00	0.06
Singapore	**-0.08**	0.02	**0.25**	0.09	**0.03**	0.01	0.02	0.01	0.31	0.23	**-0.01**	0.00	0.01	0.00	0.00	0.00	0.04

[1] The index of self-efficacy measures teacher self-efficacy in classroom management, instruction and student engagement.

[2] The index of workplace wellbeing and stress measures how teaching affects teachers' mental and physical health as well as time for personal life.

[3] Dummy variable: the reference category is male.

[4] Number of years.

[5] Dummy variable: the reference category is working part-time.

[6] Central values of the percentage ranges: 0%, 5%, 20%, 45% or 80%. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Notes: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

Regression results (Table 2.5) also show a significant negative association between teachers' wellbeing and stress and job satisfaction in all countries. Teachers with higher levels of stress tend to report lower job satisfaction. This relationship holds true for all TALIS countries and economies. While the overall variance explained by the models is medium to high (as indicated by the values for R^2), the strongest relationship is no doubt between the index of stress and wellbeing and the index of job satisfaction.

TABLE 2.5 Relationship between teachers' job satisfaction and workplace wellbeing and stress

Results of linear regression based on responses of lower secondary teachers

	Index of job satisfaction[1]																
	Dependent on:																
	Index of workplace wellbeing and stress[2]		Female[3]		Age[4]		Years of experience as a teacher at current school[4]		Working full-time[5]		Classroom composition: share of low achiever students[6]		Classroom composition: share of students with behavioural problems[6]		Classroom composition: share of students from socio economically dis-advantaged homes[6]		
	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	R^2
Australia	**-0.54**	0.02	0.13	0.09	**-0.01**	0.00	**0.02**	0.01	**0.28**	0.12	0.00	0.00	-0.01	0.00	0.00	0.00	0.27
OECD average-31	**-0.48**	0.00	**0.25**	0.02	**-0.01**	0.00	**0.01**	0.00	**0.11**	0.02	**0.00**	0.00	**-0.01**	0.00	0.00	0.00	0.25
TALIS average-48	**-0.46**	0.00	**0.21**	0.01	**0.00**	0.00	**0.01**	0.00	**0.09**	0.02	**-0.01**	0.00	**-0.01**	0.00	0.00	0.00	0.24
High-performing PISA countries																	
Alberta (Canada)	**-0.53**	0.04	0.24	0.18	0.01	0.01	-0.01	0.02	-0.23	0.21	0.00	0.00	-0.01	0.01	0.00	0.00	0.28
Estonia	**-0.42**	0.03	**0.24**	0.10	-0.01	0.01	0.00	0.00	0.03	0.07	0.00	0.00	0.00	0.00	-0.01	0.00	0.18
Finland	**-0.66**	0.03	**0.28**	0.09	**-0.01**	0.00	0.00	0.00	0.33	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.26
Japan	**-0.50**	0.02	-0.09	0.06	**-0.01**	0.00	**0.02**	0.01	-0.03	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.29
Singapore	**-0.46**	0.02	-0.08	0.08	0.00	0.00	0.01	0.01	0.04	0.17	**0.00**	0.00	**-0.01**	0.00	0.00	0.00	0.24

[1] The index of job satisfaction measures teachers' satisfaction with their current work environment and satisfaction with the profession.

[2] The index of workplace wellbeing and stress measures how teaching affects teachers' mental and physical health as well as time for personal life.

[3] Dummy variable: the reference category is male.

[4] Number of years.

[5] Dummy variable: the reference category is working part-time

[6] Central values of the percentage ranges: 0%, 5%, 20%, 45% or 80%. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

Notes: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide

BOX 2.4 Teachers' levels of stress, from primary to lower secondary education

There were no significant differences in the responses of primary and lower secondary teachers to any of the items on stress (Table A2.3).

2.4.3 Sources of stress for teachers and principals

Beyond the magnitude and impacts of stress, it is also useful to explore the factors that contribute to teachers' stress in their work. A relevant conclusion of the research conducted in the area of stress (OECD, 2020) is that the prevalence of stress differs depending on its sources. For example, stress linked to classroom activities and student interactions seems more predominant than stress related to the support received from the school and the government. TALIS 2018 sought to further explore the issues behind stress by asking both teachers and principals to what extent a series of work-related tasks constituted a source of stress (*not at all*; *to some extent*; *quite a bit*; *a lot*). The sources of stress for teachers were classified into three different groups following the TALIS 2018 Conceptual Framework (Ainley & Carstens, 2018): workload stress; student behaviour stress; and stakeholder relations.

The research literature has identified workload as a source of stress, as it shows a strong association with teachers' life balance and burn out. A lower proportion of Australian teachers than on average across the OECD reported major sources of stress (*quite a bit* or *a lot*) for the following: "having too much lesson preparation" (Australia 30%, OECD 33%) and "having too many lessons to teach" (Australia 25%, OECD 28%). A higher proportion of Australian teachers than on average across the OECD reported major sources of stress as: "having too much administrative work to do" (Australia 55%, OECD 49%) and "having too much marking" (Australia 43%, OECD 41%). Around 25 per cent

of teachers both in Australia and across the OECD reported stress from "having extra duties due to absent teachers" (Figure 2.9).

The second panel of Figure 2.9 shows that managing classrooms and student behaviour is an important source of stress reported by teachers (*quite a bit* or *a lot*). Results from TALIS 2013 showed that job satisfaction and self-efficacy diminished as the proportion of students with behavioural problems increased (OECD, 2014). Three TALIS indicators consider these elements: "being held responsible for students' achievement" (reported by 37% of Australian teachers and 44% of teachers across the OECD); "maintaining classroom discipline" (28% of Australian teachers and 38% across the OECD); and "being intimidated or verbally abused by students" (13% of Australian teachers and 14% across the OECD).

The third source of stress for teachers is their ability to respond to the requirements and needs of evolving educational systems and stakeholders. The additional tasks generated by these responsibilities can create extra work pressure on teachers and can negatively affect teachers' sense of professional wellbeing. Australian teachers are less likely to report these responsibilities as a source of stress (by *quite a bit* or *a lot*) relative to the OECD average. Thirty-eight per cent of Australian teachers reported "keeping up with changing requirements from local, municipal/regional, state or national/federal authorities" as a source of stress (OECD average 41%), while 24 per cent reported "addressing parent or guardian concerns" as a source of stress (OECD average 34%). Shifts in societal demands regarding the inclusion of special needs students in regular schools have brought about additional demands for teachers, with 25 per cent of Australian teachers reporting "modifying lessons for students with special needs" as a source of stress (OECD average 31%).

FIGURE 2.9 Teachers' sources of stress

Percentage of lower secondary teachers for whom the following are sources of quite a bit *or* a lot *of stress*

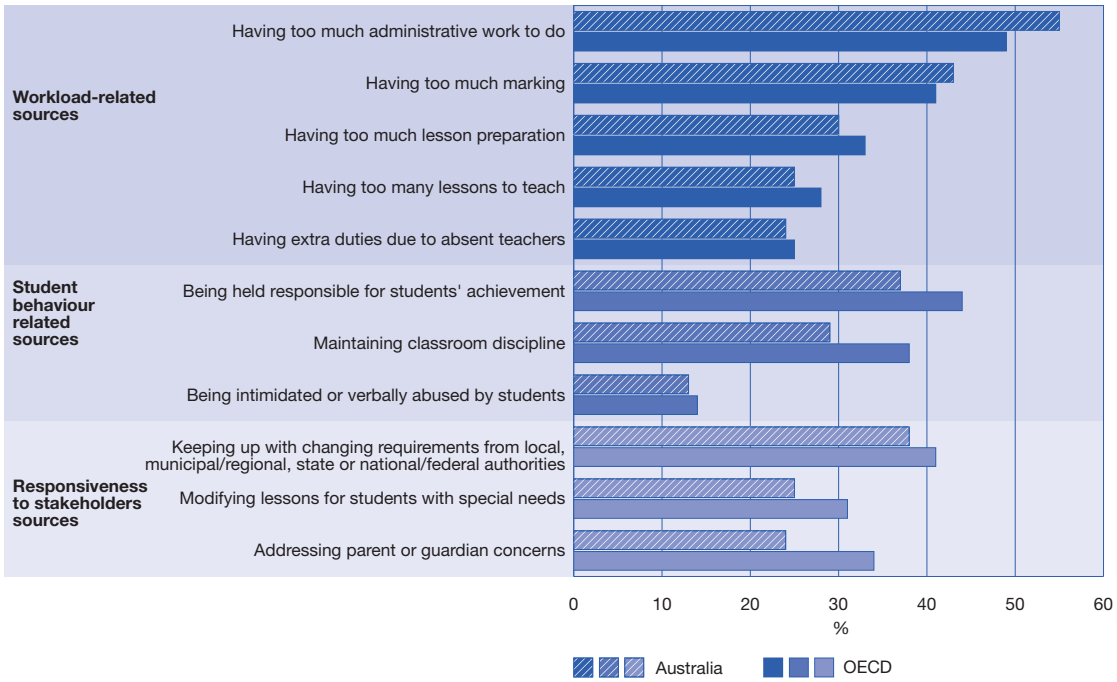


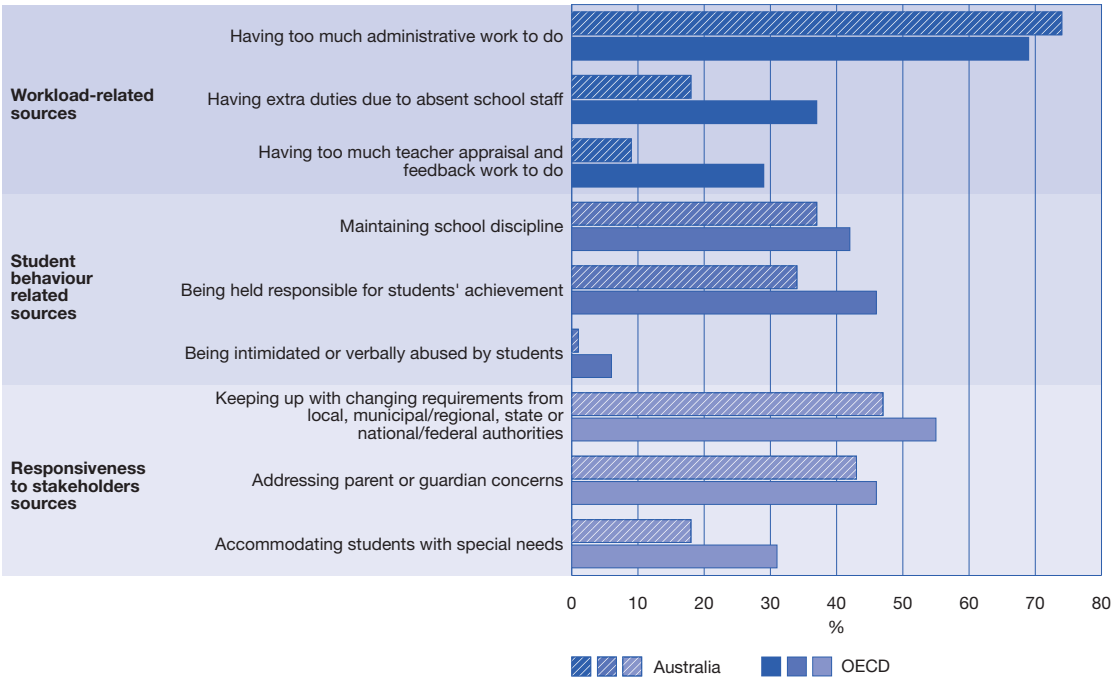
Figure 2.10 shows the sources of stress for school principals for Australia and on average across the OECD. The main source of stress reported by principals in Australia and across the OECD (by *quite a bit* or *a lot*) is "having too much administrative work to do" (74% in Australia and 69% across the OECD). Another important source of principal stress is engagement with the requirements and needs of evolving educational systems and stakeholders. This includes "keeping up with changing requirements from local, municipal/regional, state or national/federal authorities"" (Australia 47%,

OECD average, 55%), "being held responsible for students' achievement" (Australia 34%, OECD average 46%), and "addressing parent or guardian concerns" (Australia 43%, OECD average 46%).

In Australia, 89 per cent of principals of publicly managed schools report experiencing administrative work as a source of stress *quite a bit* or *a lot*, compared to only 59 per cent of principals of privately managed schools. There were also differences between principals of schools in which there was a high concentration of students with special needs, and those in which the concentration was lower. In the former schools, 87 per cent of principals reported administrative work as a source of stress, in the latter schools, just 66 per cent.

FIGURE 2.10 Principals' sources of stress, Australia and OECD average

Percentage of lower secondary principals for whom the following are sources of quite a bit *or* a lot *of stress*



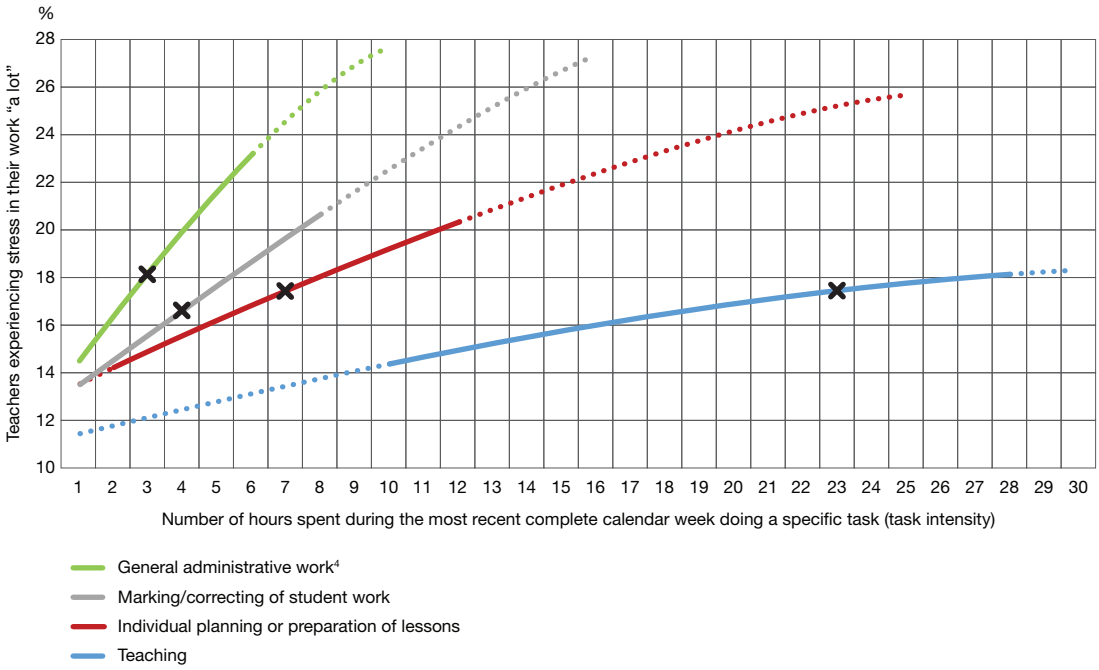
2.4.4 Teachers experiencing a lot of stress in their work and task intensity

Figure 2.11 shows that the average proportion of teachers reporting a lot of stress in their work increases more sharply when teachers spend more time on planning, marking and administrative tasks. For example, 22 per cent of teachers across the OECD who reported spending five hours per week on administrative tasks reported experiencing a lot of stress in their work, compared to 18 per cent of teachers who spend three hours per week on administrative tasks.

These results suggest that teachers who spend many hours doing administrative tasks are more likely to report high levels of stress than those who spend many hours teaching in the classroom. This result echoes similar findings displayed in the TALIS 2018 national report of England (United Kingdom), which showed that working hours, particularly for non-teaching tasks, had a strong association with the proportion of primary and lower secondary teachers reporting their tasks as unmanageable (Jerrim & Sims, 2019).

FIGURE 2.11 Teachers experiencing a lot of stress in their work and task intensity

Estimated percentage of teachers experiencing stress in their work a lot*, by task intensity (OECD average)*[1, 2, 3]



[1] Results of binary logistic regression based on responses of lower secondary teachers.

[2] The "X" in the figure represents the share of teachers experiencing stress in their work "a lot", given an average task intensity (OECD average-31).

[3] Continuous lines cover 80% of the lower secondary teacher population across OECD countries and economies participating in TALIS; dashed lines are used to indicate the expected percentage of teachers experiencing stress "a lot" in their work below and above the 1st and 9th decile of the task intensity distributions.

[4] Estimates for "general administrative work" are obtained considering a task intensity ranging between 0 and 49 hours.

2.4.5 What accounts for variance in teachers' levels of stress?

How can educational systems affect the wellbeing and stress levels of teachers? An important first step to answer this question is understanding whether stress is a phenomenon mainly explained by school differences (for example, school type, location, composition or resources) or by teacher differences (for example, qualifications, experience and type of contract). Depending on the answer, systems will know whether it would be more effective to develop policies targeting schools or targeting teachers. TALIS 2018 estimates the amount of variance accounted for by school characteristics in teachers' responses to wellbeing and stress measures (that is, the extent teachers experience stress in their work; if work leaves room for personal time; the impact on their mental health; and the impact on their physical health) and in teachers' responses to workload stress measures (that is, teacher stress due to lessons to prepare and to teach, to marking, to administrative work and to extra duties due to absent students) (Table 2.6).

TALIS 2018 results showed that, on average across the OECD, only six per cent of the variance in teachers' wellbeing and stress is accounted for by school characteristics. In other words, most of the variance in teachers' wellbeing and stress is accounted for by teachers' individual traits and characteristics. There is some variation between countries seen in Table 2.6. In Australia, eight per cent of the variance in teacher wellbeing and stress is accounted for by school characteristics, slightly higher than in Alberta (Canada) (7%) and higher than any of the other high-performing PISA countries. In Finland in particular, the between–school variation is just over three per cent. Relatively higher levels of variance accounted for by schools signal that there may be school factors associated with the levels of stress and wellbeing of teachers.

On average across the OECD, only seven per cent of the variance in teachers' workload stress is accounted for by school differences (Table 2.6). It is worth noting that these results may appear somewhat counterintuitive, since it might have been expected that teachers' stress due to work load would have a strong link with school characteristics, such as school composition or location. However, the results indicate that teachers' responses to these items are not so much dependent on any particular school trait as on their own characteristics as teachers. The proportion of variation in Australia is one of the lowest, at three per cent, compared to almost 13 per cent for Estonia and eight per cent in Japan.

TABLE 2.6 Variation in teachers' stress

Distribution of variance in teachers' stress between and within schools, based on responses of lower secondary teachers

	Index of workplace wellbeing and stress[1]				Index of workload stress[2]			
	Intra-class correlation coefficient[3]		Between-school variation	Within-school variation	Intra-class correlation coefficient[3]		Between-school variation	Within-school variation
	ICC	S.E.	%	%	Between school variance	S.E.	%	%
Australia	0.081	0.031	8.1	91.9	0.030	0.013	3.0	97.0
OECD average-31	0.062	0.003	6.2	93.8	0.067	0.003	6.7	93.3
TALIS average-48	0.070	0.003	7.0	93.0	0.072	0.003	7.2	92.8
High-performing PISA countries								
Alberta (Canada)	0.067	0.024	6.7	93.3	0.066	0.030	6.6	93.4
Estonia	0.047	0.011	4.7	95.3	0.126	0.017	12.6	87.4
Finland	0.034	0.009	3.4	96.6	0.069	0.014	6.9	93.1
Japan	0.045	0.011	4.5	95.5	0.079	0.015	7.9	92.1
Singapore	0.044	0.015	4.4	95.6	0.037	0.010	3.7	96.3

[1] The index of workplace wellbeing and stress measures how teaching affects teachers' mental and physical health as well as time for personal life.

[2] The index of workload stress measures teachers' stress caused by lessons to prepare and to teach, marking, administrative work as well as by extra duties due to absent students.

[3] The intra-class correlation coefficient represents the share of the variance that lies between the cluster variable – in this case schools – and, for a given indicator, it is calculated by dividing the variation between schools by the sum of its variation between and within schools.

Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide

BOX 2.5 Sources of stress for teachers and school leaders, from primary to lower secondary education

Teachers

Table A2.3 shows the percentage of Australian teachers at primary and lower secondary level who responded *quite a bit* or *a lot* that the items were sources of stress. Table A2.4 shows the same for principals of primary and lower secondary schools. Administrative work, as for secondary teachers in Australia, was the biggest source of stress for primary teachers. Almost half (49%) of the primary teachers surveyed listed this as a source of stress. Forty-two per cent identified "keeping up with changing requirements from local, municipal/regional, state or national/federal authorities", while 40 per cent identified "being held responsible for students' achievements". A higher proportion of primary than secondary teachers identified "having too much lesson preparation" (39% of primary and 30% of secondary teachers), "having too many lessons to teach" (29% of primary and 25% of secondary teachers), "addressing parent or guardian concerns" (31% of primary and 24% of secondary teachers), and "modifying lessons for students with special needs" (30% of primary and 25% of secondary teachers) as major sources of stress, which perhaps reflects differences in the roles of primary and secondary teachers in Australia.

"Maintaining classroom discipline" was a source of stress for both groups (31% of primary and 28% of secondary teachers), and "being intimidated or verbally abused by students" the lowest stress for both groups, but lower for primary teachers, as would be expected (9% of primary and 13% of secondary teachers).

School leaders

There were very few significant differences in principals' reported sources of stress. For primary principals, as with secondary principals, the major source of stress was "having too much administrative work to do", identified by 77 per cent of primary principals and 74 per cent of secondary principals as a source of stress *quite a bit* or *a lot*. The other two most reported sources of stress were "keeping up with changing requirements from local, municipal/regional, state or national/federal authorities", (59 per cent of primary principals and 47 per cent of secondary principals) and "addressing parent or guardian concerns", identified as a source of stress by 56 per cent of primary principals and 43 per cent of secondary principals.

2.5 Teacher attrition

Attrition, unlike turnover (which refers to teachers permanently leaving their school but remaining in the profession) refers to teachers leaving the profession altogether.

Summarising the research presented by the OECD (OECD, 2020), attrition can have a detrimental impact on student learning and can affect student achievement by having a negative impact on the school climate and on implementation of the curriculum. Furthermore, attrition can lead to severe problems of staff shortages, especially when they affect disadvantaged schools. These absences also imply significant financial costs for educational systems, as they need to replace qualified teachers in the affected schools, entailing significant opportunity costs, as the resources devoted to training new staff could have been spent on other related policy areas, such as further teacher training or professional development, and efficiency costs for schools, as they need to spend time and resources to integrate new teachers into the school organisation and culture.

TALIS only surveys in-service teachers and hence does not provide a direct measure of attrition. However, it has indicators that can work as proxy measures for attrition, such as the intention to stay in their work. Both teachers and principals were asked how many more years they would like to keep working. Although this indicator is influenced by the age of respondents, due to retirement-related attrition, it can still provide useful information on teachers' career plans or aspirations. In

interpreting these results, it is important to keep in mind that TALIS does not provide information on the reasons why teachers or school leaders may want to stop working in their respective roles. It is possible that, although teachers and school leaders report planning to stop work relatively soon, they may want to continue in the profession in another capacity, such as on the school management team or in a role outside the school, such as in the local or national administration or as a researcher. Nevertheless, whatever plans teachers and school leaders may have, the indicator provides an idea of when they expect to stop being in their classroom or being in charge of the school. This provides useful information for education systems as to the kinds of replacement efforts likely to be required.

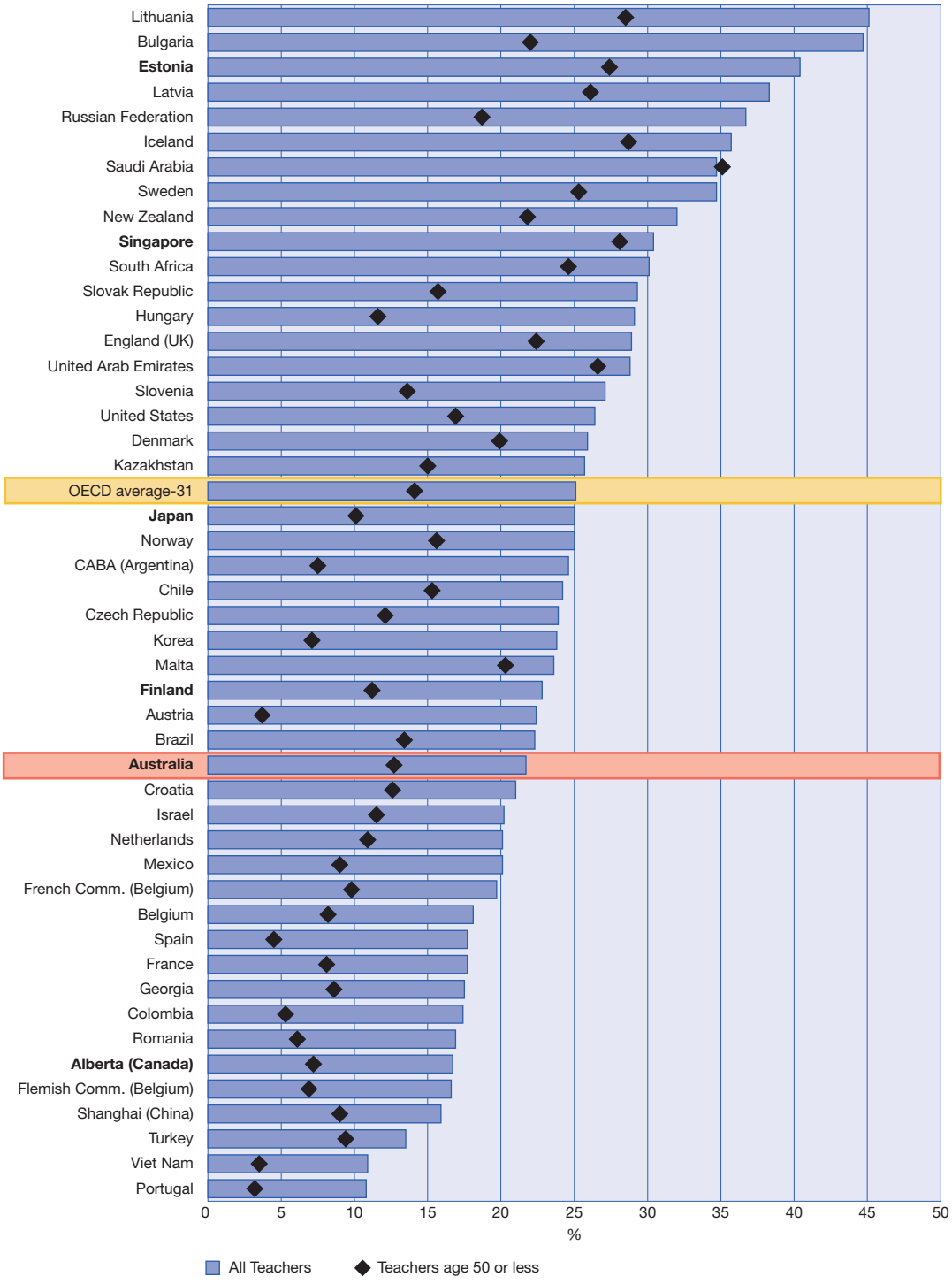
On average across the OECD, teachers reported that they would like to continue working as teachers for an additional 15 years. Since the average age of teachers across the OECD is 44 years (OECD, 2019), an additional 15 years takes teachers close to retirement age for the majority of countries and economies participating in TALIS. In Australia, this is also true, with an average age for teachers of 42 years and teachers reporting that they want to teach for an additional 16 years. On average across the OECD, principals intend to work eight more years, compared to 10 years for Australian principals. Given that the average age of principals across the OECD is 52 years (OECD, 2019) and the average age of Australian principals is 51 years, principals may be thinking about retirement age when declaring the number of years they would like to remain in their work.

In order to identify countries and economies which would experience more pressing concerns for the renewal of the teaching workforce, analysis was conducted on the percentage of teachers who want to leave teaching within the next five years. These data are presented in Figure 2.12.

In Australia, 22 per cent of teachers stated they want to leave teaching within the next five years, compared with 25 per cent of teachers on average over the OECD. In some countries the percentages are much higher – in Estonia 40 percent of teachers and in Singapore 30 per cent of teachers reported wanting to leave the profession within the next five years.

Further analysis was conducted looking just at teachers 50 years of age or less. In Australia, 13 per cent, and across the OECD on average 14 per cent of teachers in this age group reported wanting to leave teaching within the next five years. Much larger proportions of teachers in this age group in Estonia (27%) and Singapore (28%) want to leave teaching.

FIGURE 2.12 Teachers wanting to leave teaching within the next five years



Note: High-performing PISA countries in bold. For explanation refer to Reader's Guide.

What are the main factors associated with teachers wanting to leave their work? In exploring this question, TALIS 2018 links several of the items explored in this chapter. The analysis starts by examining the association between stress and the intention to leave their work within the next five years. Research evidence has highlighted that stress levels might play an important role in teachers' decisions to leave their profession. Figure 2.13 shows that teachers who reported experiencing a lot of stress in their work are more likely to report that they wish to leave their work within the next five years. This holds true on average across the OECD and for Australia, Estonia, Finland, Japan,

and Singapore, but not Alberta (Canada), after controlling for teachers' age, gender, experience at current school and type of contract as well as characteristics of the target class.

Comprehensive research cited by OECD (2020) argues that schools "may have the capacity to limit the negative association that stress has with attrition" (p. 31) For example, research has found that motivation, work engagement and self-efficacy are able to mediate the relationship between stress and the desire to leave the profession, and that working conditions and school support play a pivotal role in the retention of teachers. In particular, the level of autonomy and peer collaboration seems to play an important role in improving the wellbeing of teachers.

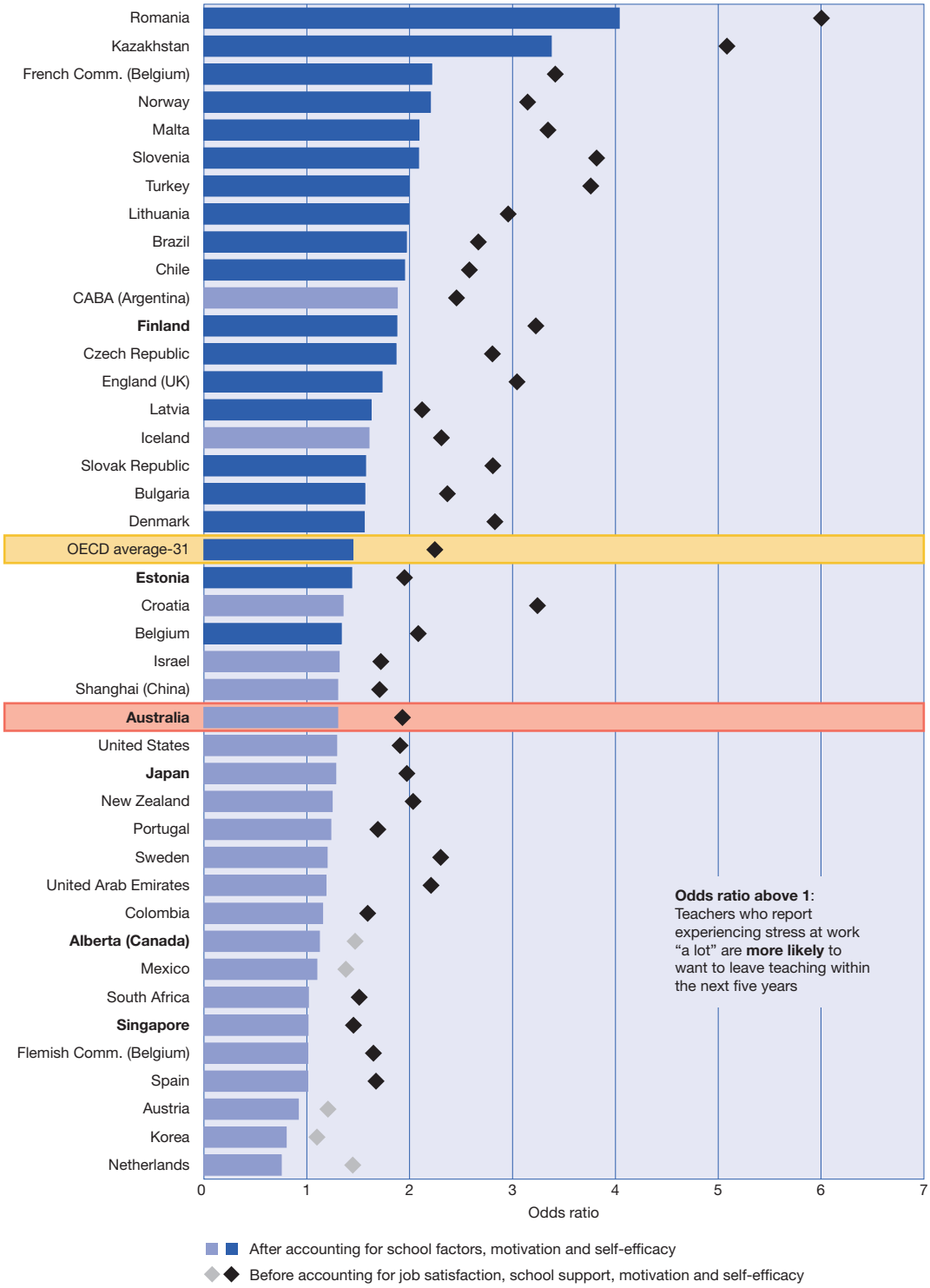
The OECD introduced a number of mediating variables into the original regression equation to account for the effects described in the previous paragraph. The first of these was the perception of whether the teaching profession is valued in society (as a proxy for motivation), and the scale for self-efficacy. To include factors pertaining to school support, the model used the professional collaboration scale and the satisfaction with autonomy in the target class scale. Participation in formal induction activities and effective professional development was also included as a component of work support for teachers. Finally, the model introduced the job satisfaction scale to have an overall measure of teachers' perceptions of their work environment.

Figure 2.13 shows that, after accounting for job satisfaction, school support, motivation and self-efficacy, the relationship between stress and the intention to leave their work within the next five years stops being significant for 17 TALIS countries and economies, including Australia, Japan and Singapore. A detailed look at the association between these indicators and the intention by teachers to leave their work within the next five years reveals that the job satisfaction scale may explain this loss in significance between stress and the intention to leave work. Indeed, for 42 TALIS countries and economies, including Australia and all of the PISA high-performing countries, the higher the level of job satisfaction the less likely teachers are to express an intent to leave their work in the next five years. Overall, the result hints at the pivotal role that job satisfaction may play in retaining teachers in the profession.

For the other 18 TALIS countries and economies, the relationship between stress and the intention to leave their work within the next five years remains significant after accounting for job satisfaction, school support, motivation and self-efficacy (Figure 2.13). However, the likelihood is lower for all of these countries and economies, highlighting the importance of these additional indicators in ameliorating the association between stress and the desire to leave their work – provided that there are benefits and positive associations with their profession, teachers are able to show resilience to stress and choose to remain.

FIGURE 2.13 Relationship between wanting to leave the profession within the next five years and experiencing stress at work, by school factors, motivation and self-efficacy

Likelihood of teachers wanting to leave teaching within the next five years related to experiencing stress at work a lot[1,2,3,4]



[1] Results of binary logistic regression based on responses of lower secondary teachers.

[2] An odds ratio indicates the degree to which an explanatory variable is associated with a categorical outcome variable. An odds ratio below one denotes a negative association; an odds ratio above one indicates a positive association; and an odds ratio of one means that there is no association.

[3] The predictor is a dummy variable: the reference category refers to lower secondary teachers experiencing stress at work "quite a bit", "to some extent", "not at all".

[4] The analysis is restricted to teachers reporting that their teaching in the target class is not directed entirely or mainly at special needs students. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

[5] Controlling for gender, age, years of experience working at the school, working full-time and classroom composition of the target class (i.e. share of low achiever students, share of students with behavioural problems, share of students from socioeconomically disadvantaged homes).

[6] Controlling for gender, age, years of experience working at the school, working full-time and classroom composition of the target class and satisfaction with target class autonomy, effective professional development, participation in formal induction activities at current school, professional collaboration in lessons among teachers, teachers' views of how society values their profession, self-efficacy and job satisfaction.

Notes: Statistically significant values are marked in a darker tone. High-performing PISA countries in bold. For explanation refer to Reader's Guide.

CHAPTER 3

Providing teachers and principals with secure, flexible and rewarding jobs

Key findings

- Around 14 per cent of Australian teachers reported that they are employed on a temporary contract of any duration, but it is much higher for teachers under 30 (about 35%). Around 16 per cent of Australian teachers reported that they work part-time, with a higher proportion among female teachers and older teachers.
- Teachers working on a fixed-term contract of less than one year tend to feel less confident in their teaching. The same is true for teachers working part-time.
- Around 87 per cent of teachers who are on contracts for more than 90 per cent of full-time work more than 35 hours a week. Around one-quarter of teachers with contracts of 70 per cent or less of full-time also work more than 35 hours a week.
- In Australian schools, appraisals are most often conducted by members of the school management team other than the principal, or by the teacher's mentor. On average across OECD countries it is more usual for school principals to conduct appraisals.
- Just over two-thirds (67%) of Australian teachers and 74 per cent of principals report that they are satisfied with the salary they receive for their work. Satisfaction with salary among teachers is higher in privately managed schools, and lower in schools with high concentrations of disadvantaged students or immigrant students. A higher proportion of both teachers (78%) and principals (84%) report that they are satisfied with other terms of their employment.
- Teachers' satisfaction with their terms of employment is more strongly associated with the support they receive for continuous professional development, their relationships with students, and their participation in the governance of the school than it is with specific contractual arrangements such as fixed-term or part-time work.

3.1 Introduction

This chapter examines the working conditions of teachers and school leaders, including appraisal processes, as well as their satisfaction with them. It begins by discussing job security among teachers, along with the prevalence of part-time work for teachers and principals, and teaching across multiple schools. The chapter then reviews the characteristics of formal teacher appraisal procedures across the TALIS countries and economies, including: those conducting appraisals, the methods used and the consequences of these evaluations. Finally, it discusses teachers' and principals' satisfaction with their salary and other working conditions.

Working conditions are a broad set of work-related characteristics that can determine the perceived quality of a job. They include remuneration, working hours and contractual arrangements, the physical and social environment, work intensity, career prospects, autonomy, participation in decision-making, teamwork and trust.

There are many reasons to ensure those working in schools have good working conditions, beyond their individual wellbeing and the general functioning of the education system. Good working conditions help to:

- attract good candidates to the teaching profession
- retain good teachers
- improve teachers' motivation and self-efficacy.

3.2 Job security and flexible time arrangements in schools

In addition to salary (on which TALIS collects no first-hand data), the attractiveness of teaching as a profession relies on factors such as job security, part-time work and other working arrangements.

3.2.1 Teachers reporting that they work on a fixed-term contract

Fixed-term contracts have a specified duration. At the end of a fixed-term contract, teachers can keep working at the same school if their contracts are renewed or extended. Employing staff on fixed-term contracts makes it easier for schools and education authorities to respond to changes in their organisational and teaching needs, and gives schools opportunities to evaluate new teachers' skills and 'fit' with the school environment, before engaging them permanently.

However, by its nature, fixed-term employment involves some degree of insecurity and unpredictability, which may cause strain and prevent some teachers from functioning optimally in their work environment. This can translate into uncertainty for students, as they cannot know in advance which teaching staff they will have in the near future. Fixed-term employment can also create dual labour markets where teachers have different statutory rights, potentially reducing their opportunities and incentives to collaborate and develop professionally.

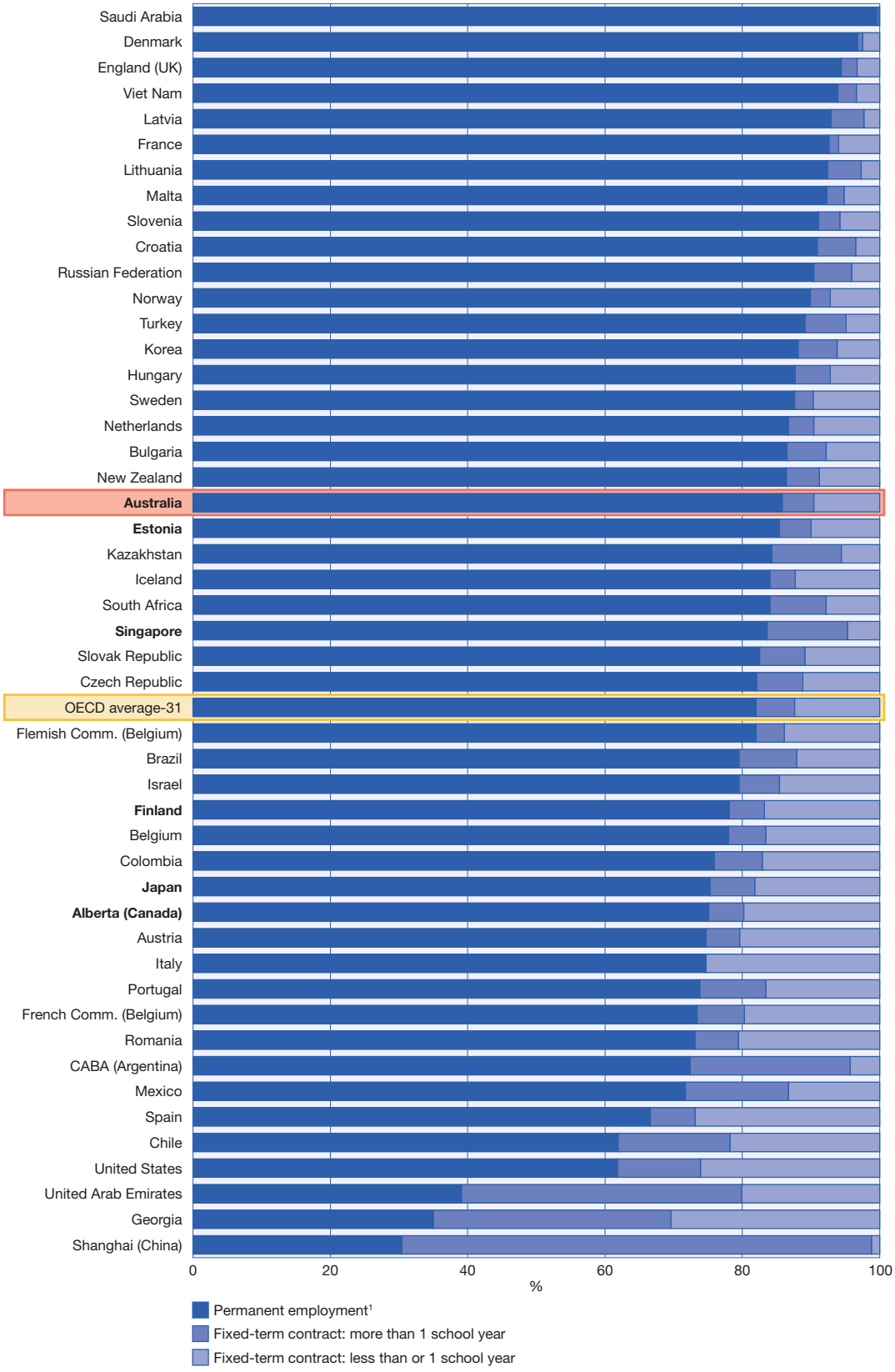
In Australia, 86 per cent of teachers are permanent employees, higher than the OECD average of 82 per cent (Figure 3.1). A further five per cent of Australian teachers and six per cent across the OECD have fixed-term contracts for more than one year. The remainder, 10 per cent in Australia compared to a significantly higher 12 per cent across the OECD, have a fixed-term contract for one year or less.

The mix of different types of contracts varies across countries, even across the high-performing PISA countries. Australia has a higher percentage of permanent teachers than these comparison countries, other than Estonia; Japan and Alberta (Canada) have the lowest percentage of the comparison countries with around 75 per cent of their teaching workforce employed on permanent contracts.

The percentage of teachers on short-term contracts, those of one year or less, is also varied. Australia and Estonia are quite similar, while the percentage of such contracts in Singapore is very small (5%), and this percentage is relatively higher in other comparison countries (Finland 17%, Japan 18%, Alberta (Canada) 20%).

FIGURE 3.1 Teachers' employment on fixed-term contracts

Percentage of lower secondary teachers reporting that they work on a fixed-term or a permanent contract



[1] Permanent employment refers to an ongoing contract with no fixed end-point before the age of retirement.

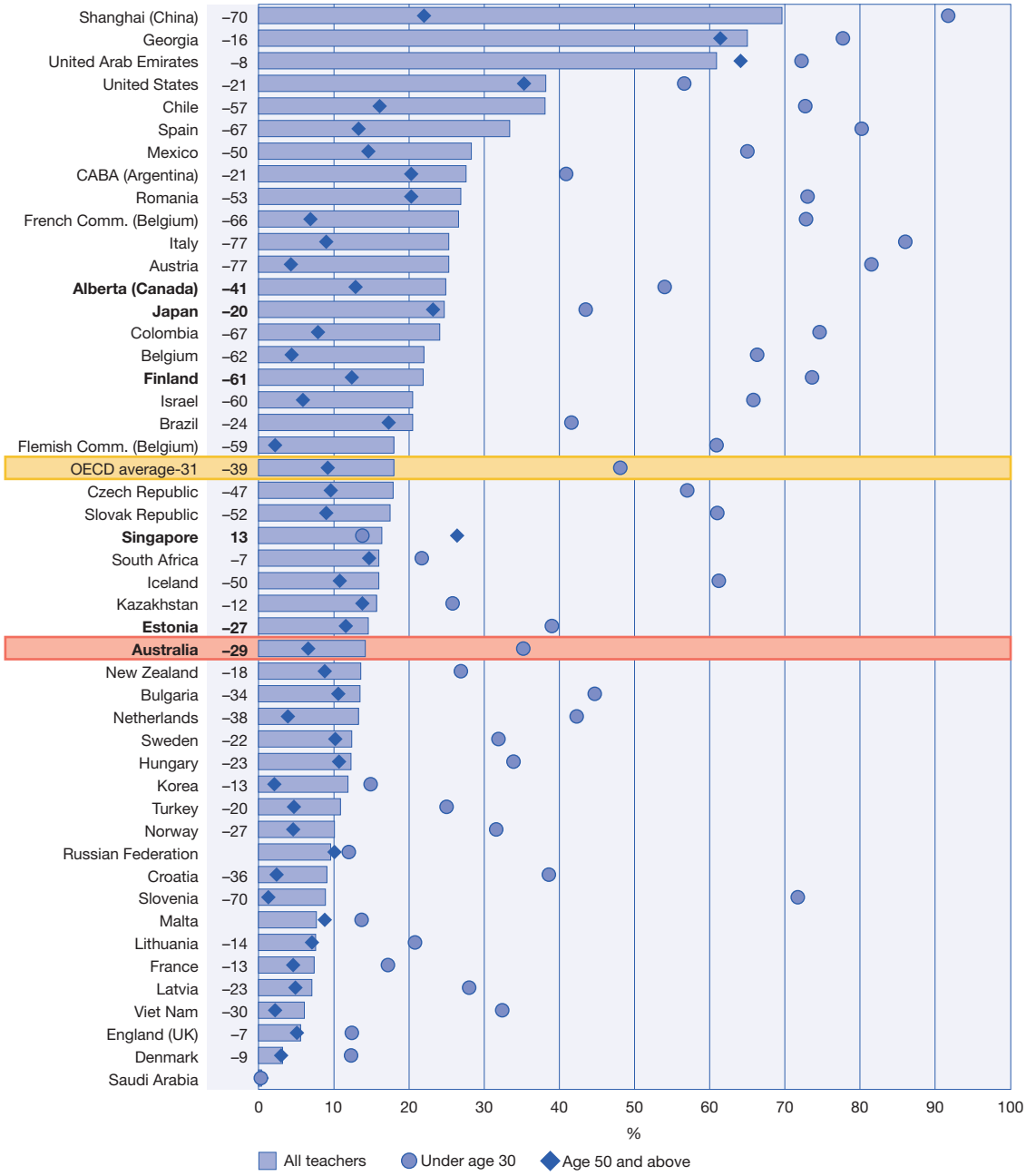
Note: High-performing PISA countries in bold. For explanation refer to Reader's Guide.

The share of teachers reporting that they work on fixed-term contracts is generally related to teachers' age (Figure 3.2). Within education systems, a larger proportion of younger teachers are employed on fixed-term contracts. Younger teachers are more likely to have recently joined the profession, so they could be on probationary periods and have prospects of receiving a permanent contract in the near future. However, a high proportion of younger teachers on fixed-term contracts can be of concern. According to teachers' unions around the world, teachers on fixed-term contracts tend to be less protected by pension schemes, less often awarded study leave, and less entitled to employment benefits and rights, including family benefits and annual holiday pay. This risks making the teaching profession less attractive to younger people, despite the widely shared goal of making teaching attractive for younger people as large numbers of older teachers move into retirement.

In Australia, 35 per cent of teachers under the age of 30 reported working on a fixed-term contract, which is substantially lower than the OECD average of 48 per cent. The percentage of teachers over 50 working on fixed-term contracts is much lower in Australia (7%) and similar to that across the OECD on average (9%). However, there is again wide variation across countries. In Finland, 74 per cent of teachers under 30 and 12 per cent of those over 50 are on fixed-term contracts, while in Singapore, 14 per cent of teachers under 30 and 26 per cent of teachers aged 50 and above were on a fixed-term contract.

FIGURE 3.2 Teachers' employment on fixed-term contracts, by age

Percentage of lower secondary teachers reporting that they work on a fixed-term contract[1]



[1] Includes teachers answering that they have a fixed-term contract for a period of "more than 1 school year" or "1 school year or less".

Notes: Statistically significant differences between teachers aged 50 and above and teachers aged under 30 are shown next to the country/economy name. High-performing PISA countries in bold. For explanation refer to Reader's Guide.

There is a large variation across countries and some within countries. In Australia, there was a higher percentage of teachers in publicly managed schools than privately managed schools on fixed-term contracts, and this is different to the average across the OECD, where a larger percentage of teachers in privately managed schools were on a fixed-term contract (Table 3.1). There was also a significantly higher percentage of teachers on fixed-term contracts in disadvantaged schools in Australia.

TABLE 3.1 Lower secondary teachers' employment on fixed-term contracts, by teacher and school characteristics, Australia and OECD average

	Percentage of teachers on a fixed-term contract[1]							
	Australia				OECD average			
			Difference				Difference	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Gender								
Male	13	1.3	3	1.7	19	0.3	**1**	0.4
Female	15	1.0			18	0.3		
Age								
< 30 years	35	1.9	**29**	2.1	48	0.7	**39**	0.7
≥ 50 years	7	1.1			9	0.3		
Years teaching								
≤ 5 years	35	1.9	**27**	1.9	46	0.5	**35**	0.5
>5 years	8	0.6			11	0.2		
School location[2]								
Rural	19	5.2	5	5.2	21	1.0	1	1.1
Town	14	1.5			17	0.3		
City	14	0.9			19	0.4		
School type								
Publicly managed[3]	17	1.0	**6**	1.5	17	0.2	**9**	0.9
Privately managed[4]	11	1.1			28	0.8		
By concentration of socioeconomically disadvantaged[5] students								
≤ 30%	13	0.9	**5**	1.9	18	0.3	0	0.7
> 30%	18	1.6			20	0.5		
By concentration of immigrant[6] students								
≤ 10%	14	1.1	1	1.3	17	0.2	**3**	0.7
> 10%	15	0.9			20	0.6		
By concentration of special needs[7] students								
≤ 10%	14	0.9	0	1.6	18	0.3	0	0.6
> 10%	14	1.4			18	0.5		

[1] Includes teachers answering that they have a fixed-term contract for a period of "more than 1 school year" or "1 school year or less".

[2] Differences shown are for city - rural.

[3] A publicly managed school is a school whose principal reported that it is managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise. In the Principal Questionnaire, this question does not make any reference to the source of the school's funding which is reported in the preceding question.

[4] A privately managed school is a school whose principal reported that it is managed by a non-governmental organisation (e.g. a church, trade union, business or other private institution). In the Principal Questionnaire, this question does not make any reference to the source of the school's funding, which is reported in the preceding question. In some countries, the privately managed schools category includes schools that receive significant funding from the government (government-dependent private schools).

[5] "Socioeconomically disadvantaged students" refers to students living in homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care.

[6] "Immigrant students" refers to "students who are immigrants or with a migrant background", as reported by the school principal. An "immigrant student" is one who was born outside the country. A "student with a migrant background" has parents who were both born outside the country.

[7] Students with special needs are those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged.

Note: Statistically significant differences in bold.

There have been no significant changes in the percentage of Australian teachers permanently employed, nor the percentage of those on fixed-term contracts, over the three TALIS cycles (2008, 2013, 2018).

3.2.2 Teachers and principals reporting that they work part-time

TALIS asks teachers to report their employment workload at their school and across all teaching employment combined. Teachers can report working full-time (more than 90% of full-time hours) or part-time (divided into three categories: 71-90% of full-time hours; 50-70% of full-time hours; and

less than 50% of full-time hours). TALIS also asks principals to report if they are employed full-time (more than 90% of full-time hours) as a principal and if they have teaching obligations.

Eighty-four per cent of Australian teachers reported working full-time, higher than the OECD average of 79 per cent. Fewer Australian teachers reported between 71 and 90 per cent of full-time hours (10%), fewer still between 50 and 70 percent (5%) and only a small percentage work less than 50 per cent of full-time hours (2%). Estonia has the smallest percentage of full-time teachers (65%), and has a substantial percentage of teachers working less than 50 per cent of a full-time load (16%). In contrast, 95 per cent of teachers in Singapore work full-time.

TABLE 3.2 Teachers' reports of working part-time

	Percentage of lower secondary teachers with the following employment status, in terms of working hours, across all teaching employment[1]							
	Full-time (more than 90% of full-time hours)		Part-time (71-90% of full-time hours)		Part-time (50-70% of full-time hours)		Part-time (less than 50% of full-time hours)	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia	84	0.7	10	0.6	5	0.4	2	0.3
OECD average-31	79	0.2	10	0.1	7	0.1	4	0.1
TALIS average-48	79	0.2	10	0.1	7	0.1	5	0.1
High-performing PISA countries								
Alberta (Canada)	88	1.7	7	1.2	3	0.6	2	0.6
Estonia	65	1.2	9	0.6	10	0.6	16	0.7
Finland	92	0.5	4	0.4	2	0.3	2	0.3
Japan	90	0.6	4	0.3	3	0.3	4	0.4
Singapore	95	0.4	4	0.4	1	0.2	0	0.1

[1] The employment status across all teaching employments has been assumed to be equal to the employment status at the surveyed school for teachers who: 1. reported to work in only one school; 2. did not report their employment status across all teaching employments; 3. reported their employment status at the surveyed school.

Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide

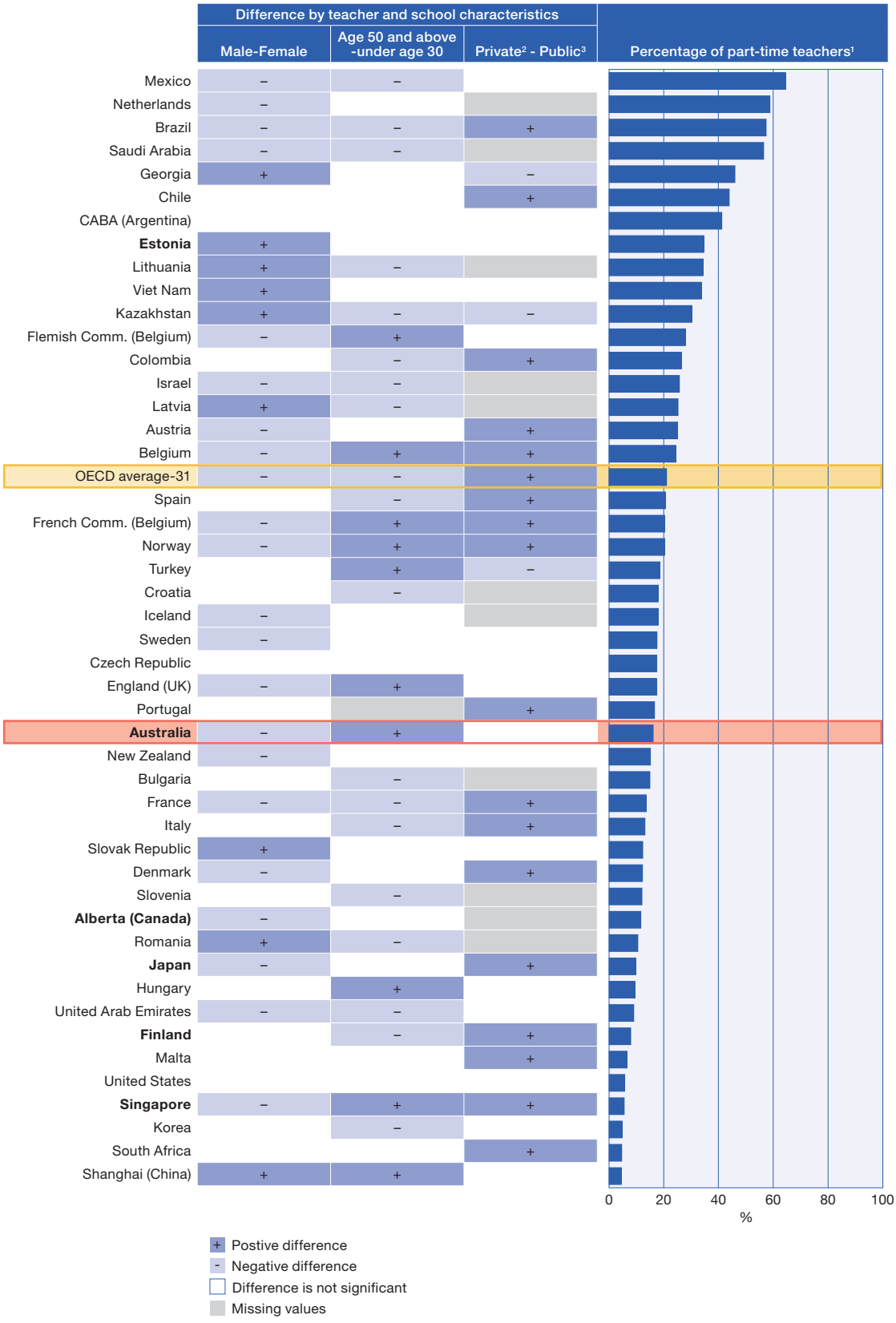
The prevalence of part-time work varies across Australian teachers (Figure 3.3). In Australia, 21 per cent of female teachers compared to eight per cent of male teachers reported working part-time. The difference of 14 percentage points was significantly larger than the average over the OECD of just four percentage points (average 19% of males, 23% of females). In Alberta (Canada), the same gender difference could be seen, of similar magnitude, while in Japan and Singapore the gender difference was much smaller. In Finland, there was no gender difference. The reverse was true in Estonia – 45 per cent of male teachers and 33 per cent of female teachers reported working part-time.

Across the OECD, on average, it is younger teachers who are more likely to be working part-time, with 26 per cent of those teachers under 30 years of age working part-time compared to 20 per cent of those over 50 years. There is a similar situation in Finland. For Australia, the opposite is true – more teachers aged over 50 years of age are working part-time (18%) than those under 30 (11%), and there was a similar finding for Singapore. For the other comparison countries there was no difference between age groups.

In 18 of the TALIS education systems with available data, part-time employment is significantly more frequent among teachers in privately managed schools than among their colleagues in publicly managed schools. This was the case in Finland, Japan and Singapore, but in Australia and Estonia there was no difference between school types.

FIGURE 3.3 Part-time teachers, by teacher and school characteristics

Results based on responses of lower secondary teachers and principals



[1] Part-time teachers are defined as those who work up to 90% of full-time hours.

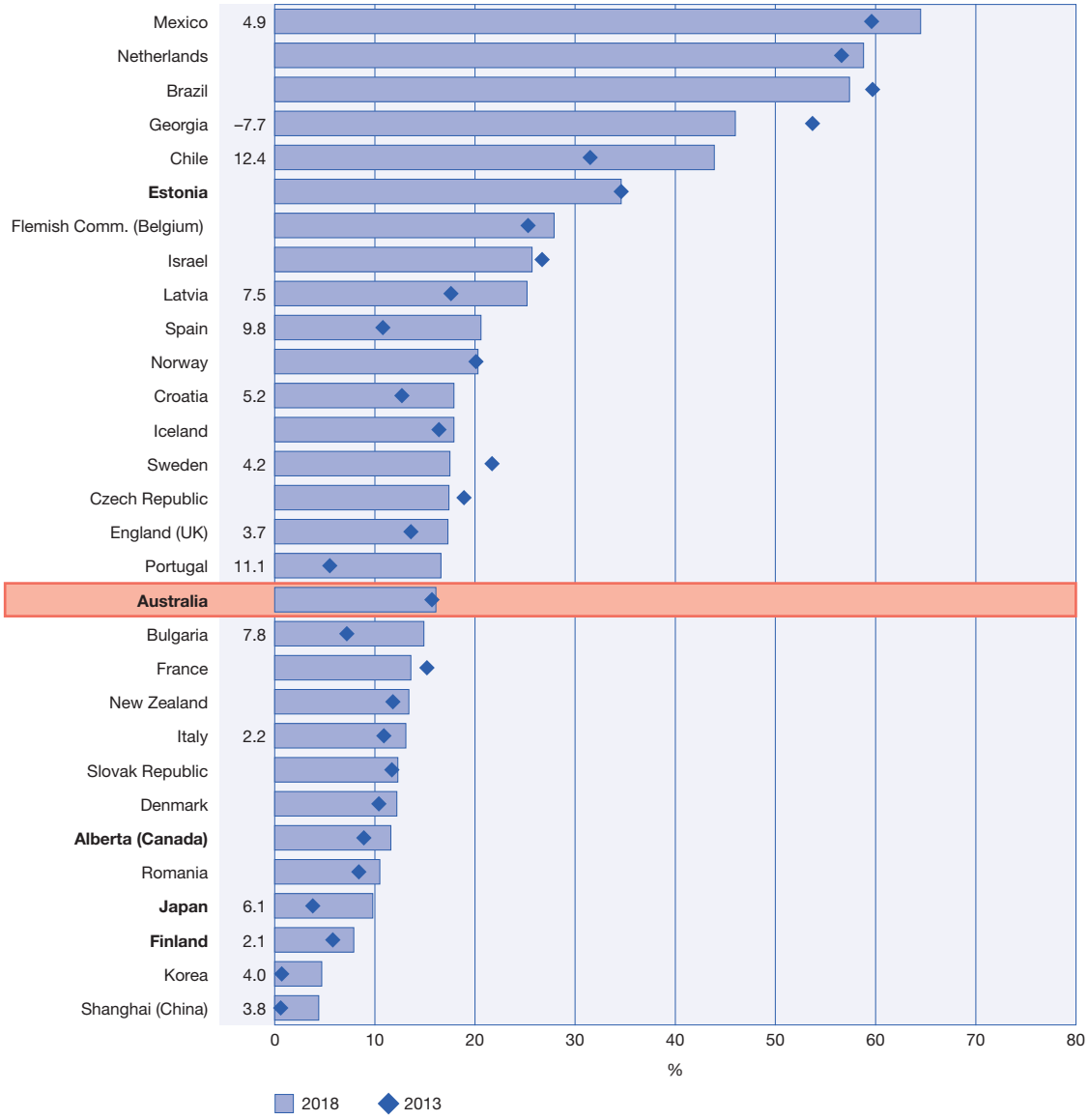
[2] A privately managed school is a school whose principal reported that it is managed by a non-governmental organisation (e.g. a church, trade union, business or other private institution). In the Principal Questionnaire, this question does not make any reference to the source of the school's funding, which is reported in the preceding question. In some countries, the privately managed schools category includes schools that receive significant funding from the government (government-dependent private schools).

[3] A publicly managed school is a school whose principal reported that it is managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise. In the principal questionnaire, this question does not make any reference to the source of the school's funding, which is reported in the preceding question.

Note: High-performing PISA countries in bold. For explanation refer to Reader's Guide.

Figure 3.4 shows the changes in the share of part-time teachers between TALIS 2013 and TALIS 2018. For Australia there has been no change over this time. This situation is the same for Estonia, and Alberta (Canada), while Japan has seen a six percentage point increase and Finland a two percentage point increase in the proportion of such teachers over this period.

FIGURE 3.4 Change in the share of part-time teachers from 2013 to 2018
Percentage of lower secondary teachers reporting that they work part-time[1]



[1] Part-time teachers are defined as those who work up to 90% of full-time hours.

Notes: Only countries and economies with available data for 2013 and 2018 are shown. Statistically significant changes between 2013 and 2018 (TALIS 2018 - TALIS 2013) are found next to the category and the country/economy name. High-performing PISA countries in bold. For explanation refer to Reader's Guide.

3.2.3 Hours of work for part-time teachers

Some teachers reported that they work the equivalent of a full-time week, despite stating that they are employed part-time. On average in Australia, 26 per cent of teachers who reported that they are employed with contracts of up to 70 per cent of full-time hours at their school also reported working 35 or more hours on tasks related to their job at the same school during the week prior to the TALIS survey. This is similar to the OECD average of 23 per cent. More than 40 per cent of part-time teachers in Singapore reported similar working hours, compared to nine per cent of those in Finland.

TABLE 3.3 Teachers working 35 hours or more per week, by employment status at current school

Results based on responses of lower secondary teachers

	Percentage of teachers working 35 hours or more per week							
	Total		Among teachers with contracts up to 70% of full-time hours[1]		Among teachers with contracts between 71% and 90% of full-time hours[1]		Among teachers with contracts over 90% of full-time hours[1]	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia	81	0.7	26	3.7	67	2.8	87	0.8
OECD average-31	68	0.2	23	0.7	57	0.9	77	0.2
TALIS average-48	66	0.2	28	0.6	54	0.7	73	0.2
High-performing PISA countries								
Alberta (Canada)	86	1.5	29	6.7	75	4.8	91	1.0
Estonia	65	1.2	16	1.7	51	3.5	83	1.2
Finland	55	1.2	9	2.4	31	4.1	60	1.3
Japan	89	0.7	18	3.0	52	6.5	95	0.4
Singapore	77	0.7	42	8.4	61	4.1	78	0.7

[1] The employment status at the surveyed school has been assumed to be equal to the employment status across all teaching employments for teachers who: (1) reported to work in only one school; (2) did not report their employment status at the surveyed school; (3) reported their employment status across all teaching employments.

Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide

3.2.4 Part-time work among school principals

TALIS asks principals to report if they are employed full-time ("more than 90% of full-time hours") as a principal and if they have teaching obligations (Table 3.4). Almost all of Australia's principals reported either that they were full-time without a teaching obligation (78%) or full-time with some teaching obligation (22%). This was not significantly different to the OECD average of 65 per cent full-time with no teaching obligation and 31 per cent full-time with some teaching obligation.

This varied widely across the high-performing PISA countries. In Japan, all principals reported that they were full-time with no teaching obligation, similarly in Singapore, with 95 per cent in this category and just five per cent full-time with no teaching obligation. In contrast, just 36 per cent of Finnish principals reported being full-time with no teaching obligation, with 60 per cent full-time with a teaching load, a further four per cent part-time with no teaching obligation and one per cent part-time with a teaching obligation. In Alberta (Canada), 26 per cent of principals are working part-time – 18 per cent with a teaching obligation and seven per cent without.

TABLE 3.4 Principals working part-time

Results based on responses of lower secondary principals

	Percentage of principals with the following employment status, in terms of working hours							
	Full-time without teaching obligation[1]		Full-time with teaching obligation[1]		Part-time without teaching obligation[2]		Part-time with teaching obligation[2]	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia	78	6.5	22	6.5	0	0.2	0	0.0
OECD average-30	65	0.6	31	0.6	2	0.5	2	0.3
TALIS average-47	61	0.5	33	0.5	2	0.3	3	0.2
High-performing PISA countries								
Alberta (Canada)	42	8.6	32	6.4	18	13.4	7	3.9
Estonia	76	2.8	20	2.7	2	0.9	3	1.3
Finland	36	3.6	60	3.9	4	2.1	1	0.9
Japan	100	0.0	0	0.0	0	0.0	0	0.0
Singapore	95	2.9	5	2.9	0	0.0	0	0.0

[1] Full-time employment is defined as more than 90% of full-time hours.

[2] Part-time employment is defined as up to 90% of full-time hours.

Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide

BOX 3.1 Job security and flexible time arrangements, from primary to upper secondary education

In Australia, fewer primary teachers than lower secondary teachers reported working with permanent contracts (76% compared to 86%, Table A3.1). Primary teachers also reported working part-time to a greater extent than lower secondary teachers.

There was little difference between primary and lower secondary principals in terms of their employment status and teaching obligation (Table A3.3). Eighty per cent of primary principals reported working full-time with no teaching obligation, and a further 17 per cent full-time with some teaching obligation. Very few primary or lower secondary principals reported working part-time.

3.2.5 How job security and flexible time arrangements are related to teacher self-efficacy and workplace wellbeing

Regression analysis was conducted to investigate whether teachers with different job security and working time feel differently about their job than other teachers. This controlled for a number of teacher characteristics (gender, age, years of experience as a teacher at current school, working on a fixed-term contract of more than one school year, working part-time between 71% and 90% of full-time hours, working in multiple schools); classroom composition (students from socioeconomically disadvantaged homes) and school characteristics (school location, school type and school size) (Figure 3.5).

The analysis showed that teachers who reported working on contracts of less than one year tend to feel less confident in their teaching ability compared to those with permanent contracts, after controlling for teacher age, gender, work experience at the surveyed school and a variety of school factors (Figure 3.5). This was the case on average over the OECD and in Australia. In contrast, no significant relationship was found between working on a fixed-term contract of more than one year and teacher self-efficacy.

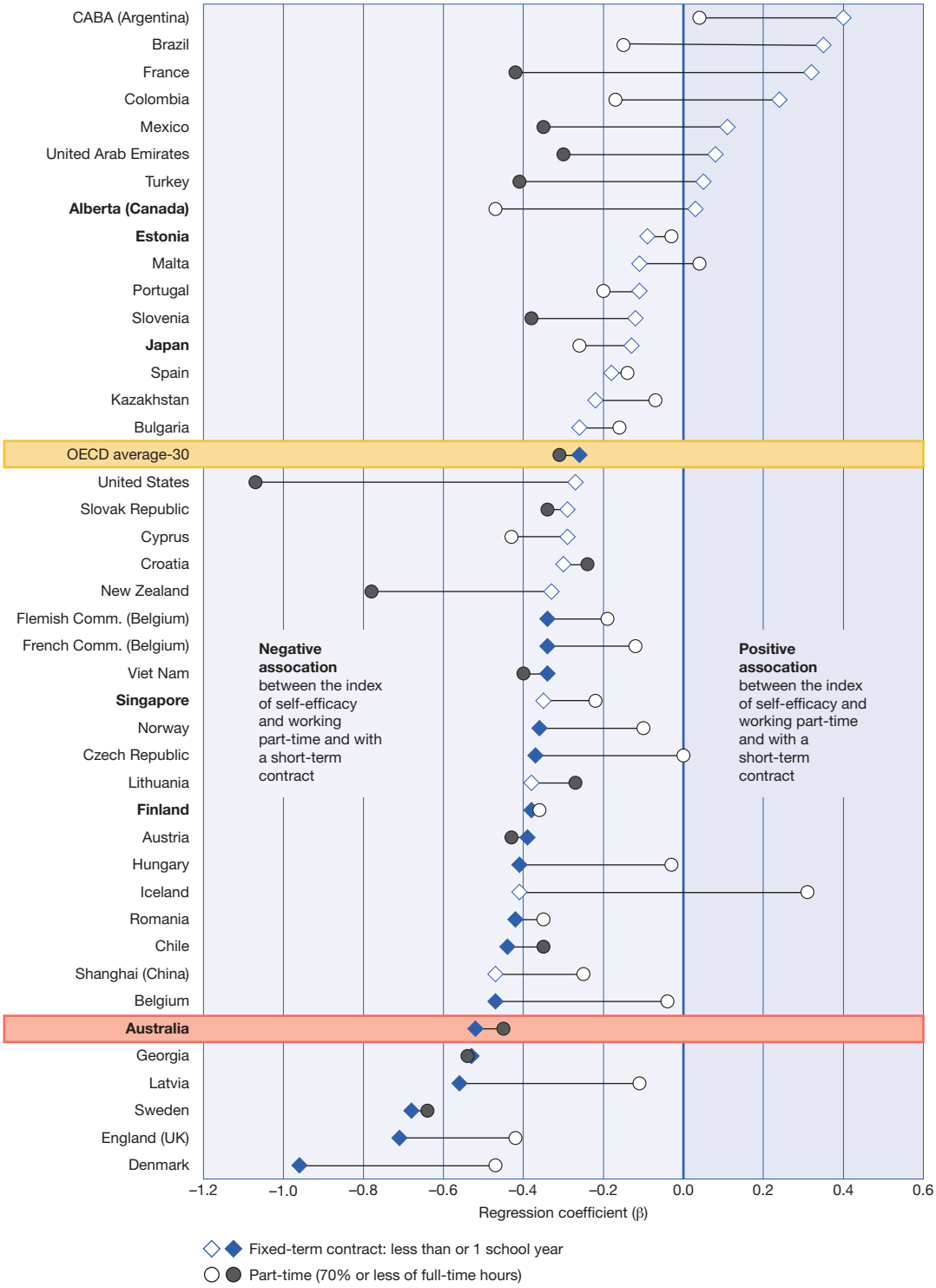
Part-time work was also negatively related to teacher self-efficacy, on average across the OECD and in Australia. Teachers working 70 per cent or less of full-time hours and teachers working between 71 per cent and 90 per cent of full-time hours tend to be less confident in their teaching than teachers

working full-time (in Australia and on average across the OECD, the regression coefficients are of similar size and not significantly different from each other).

Overall, short-term work and part-time work (jointly considered) are related to teacher self-efficacy in all education systems. Working on a fixed-term contract of less than one year, being employed for 70 per cent or less of full-time hours and being employed for between 71 per cent and 90 per cent of full-time hours are each significantly and negatively associated with self-efficacy in Australia and about one-third of the education systems with available data. In no education system is there a significant and positive association between any of these three variables and self-efficacy. In addition, in all countries and economies with available data, these three variables are, taken together, significantly associated with self-efficacy.

FIGURE 3.5 Relationship between self-efficacy and working part-time or with a short-term contract

Change in the index of self-efficacy[1] associated with reporting to work part-time or on a short-term contract[2,3,4]



[1] The index of self-efficacy measures teacher self-efficacy in classroom management, instruction and student engagement.

[2] Results of linear regression based on responses of lower secondary principals.

[3] The predictors are dummy variables: the reference category refers to working full-time (more than 90% of full-time hours) and working in permanent employment (with an ongoing contract with no fixed end-point before the age of retirement).

[4] Controlling for the following teacher characteristics: gender, age, years of experience as a teacher at current school, working full-time; classroom composition: students from socioeconomically disadvantaged homes; and school characteristics: school location index, school type and school size.

Notes: Statistically significant coefficients are marked in a darker tone. High-performing PISA countries in bold. For explanation refer to Reader's Guide.

3.3 Formal teacher appraisal

Teacher appraisal refers to the formal evaluation of teachers to make a judgement or provide feedback about their performance. It can be a tool for quality assurance, it can provide an opportunity for teachers to reflect on their teaching practices and their strengths and weaknesses and identify areas of improvement, and it can provide information to support decisions about career advancement and professional development.

TALIS 2018 asks principals if each teacher in their school is formally appraised and with what frequency. Principals also report the method used for appraisals, who conducts the appraisal, and the potential consequences of teacher appraisal.

3.3.1 Frequency and sources of teacher appraisal

Only two per cent of Australian teachers work in schools in which teachers are never appraised (Table 3.5). This is similar to Estonia and Singapore, and significantly lower than the average of seven per cent across the OECD. In Alberta (Canada) and Finland, this percentage is much larger, at 17 per cent and 41 per cent respectively.

TABLE 3.5 Percentage of teachers never formally appraised
Results based on responses of lower secondary teachers

	Percentage of teachers whose school principals report that their teachers are never formally appraised[1]	
	%	S.E.
Australia	2	0.0
OECD average-30	7	0.3
TALIS average-47	5	0.2
High-performing PISA countries		
Alberta (Canada)	17	3.8
Estonia	1	1.0
Finland	41	4.3
Japan	9	1.7
Singapore	1	0.0

[1] The percentage of teachers whose school principals report are never formally appraised by any of the sources on which TALIS collects information ("principal"; "other member(s) of the school management team"; "assigned mentors"; "other teachers (not part of the school management team)" or "external individuals or bodies").

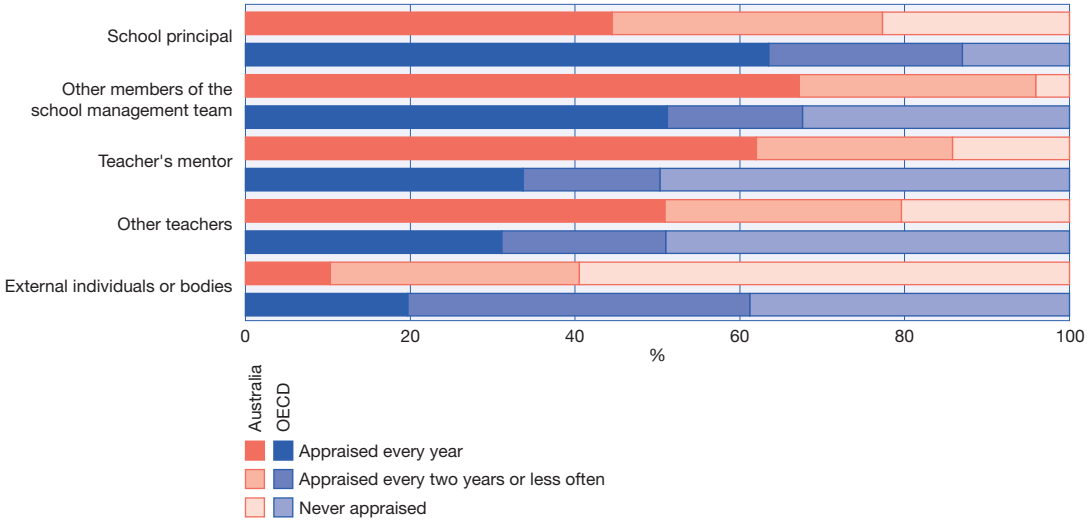
Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide

In Australian schools, appraisals are most often conducted by members of the school management team other than the principal, or by the teacher's mentor (Figure 3.6). Around 67 per cent of Australian teachers work in schools where other members of the school management team appraise each teacher every year, and 62 per cent in schools where the teacher's mentor conducts yearly appraisals. Across the OECD on average, it is more often the school principal that conducts the appraisal. Around 63 per cent of teachers on average across the OECD work in schools in which the school principal appraised teachers every year, compared to 44 per cent of teachers in Australia.

Appraisals by other sources are less common. Around 51 per cent of Australian teachers, and 31 per cent of teachers on average across the OECD, work in schools in which they are appraised annually by teachers other than their mentor or members of the school management team. Annual appraisal by an external individual or body is reported by principals of around ten per cent of Australian teachers and about 20 per cent of teachers on average across the OECD.

FIGURE 3.6 Frequency of teacher appraisal, by source

Percentage of lower secondary teachers whose school principals report the frequency with which their teachers are formally appraised (Australia and OECD average-30)



3.3.2 Methods of teacher appraisal

The information necessary to appraise teachers can be collected through a variety of methods, depending on the purposes of the appraisal. For example, if the main function of teacher appraisal is to inform career decisions and strengthen accountability, then it needs to be based on defensible and comparable sources of evidence. In contrast, if the main goal is to inform professional development and promote professional learning, then teacher self-evaluation can be a valuable tool. In any case, the use of multiple sources of evidence is essential to evaluating teachers accurately and fairly on the tasks that make up their jobs. On average, Australian teachers work in schools in which five different methods of appraisal are used to evaluate their work.

In most countries, observation of classroom teaching is typically part of teacher appraisal processes (Table 3.6). In Australia, 98 per cent of teachers work in schools where this method of appraisal is used, and this is similar to the OECD average and to all other countries other than Finland. Another common method of appraisal is the use of students' results. In Australia, 94 per cent of teachers work in schools that use school-based and classroom-based results for appraisal, and this is similar to the average over the OECD and in all comparison countries other than Finland.

The least commonly used method of appraisal in Australian schools was assessments of teachers' content knowledge. Sixty per cent of Australian teachers worked in schools in which this was commonly used, less than the OECD average of 70 per cent, and less than any of the high-performing PISA countries other than Finland.

TABLE 3.6 Methods for providing formal teacher appraisal

Results based on responses of lower secondary teachers

	Methods used for providing formal teacher appraisal in the school, average number across teachers[1]		Percentage of teachers[2] whose school principals report that the following types of information are used in the formal appraisal of teachers' work by at least one source of appraisal[3]											
			Observations of classroom teaching		Student survey responses related to teaching		Assessments of teachers' content knowledge		Students' external results[4]		School-based and classroom-based results[5]		Self-assessments of teachers' work[6]	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia	5	0.0	98	0.0	91	0.0	60	0.1	91	0.1	94	0.1	72	0.1
OECD average-30	5	0.0	96	0.3	82	0.5	70	0.7	93	0.5	94	0.4	68	0.7
TALIS average-47	5	0.0	97	0.2	83	0.4	76	0.5	93	0.4	95	0.3	72	0.5
High-performing PISA countries														
Alberta (Canada)	5	0.2	100	0.0	81	5.6	79	6.1	88	5.4	85	5.3	59	7.3
Estonia	6	0.1	99	0.6	96	1.7	90	2.8	98	1.3	98	1.3	87	3.0
Finland	4	0.2	70	5.3	82	5.0	33	5.2	80	5.4	62	6.2	36	5.4
Japan	5	0.1	99	0.7	85	2.8	72	3.4	93	1.9	90	2.2	60	4.0
Singapore	5	0.0	98	0.0	63	0.1	88	0.0	90	0.0	94	0.0	55	0.1

[1] "Across teachers" indicates that (for consistency with the other columns of this table) the average number of methods of appraisal has been calculated with teacher weights.

[2] Excluding teachers whose school principals report that their teachers are never formally appraised by any of the sources on which TALIS collects information ("principal"; "other member(s) of the school management team"; "assigned mentors"; "other teachers (not part of the school management team" or "external individuals or bodies").

[3] The appraisal can be provided by the following bodies: principal, members of the school management team, assigned mentors, other teachers and external individuals or bodies.

[4] For instance, national test scores.

[5] For instance, performance results, project results or test scores

[6] For instance, presentation of a portfolio assessment or analysis of teaching using video.

Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide.

3.3.3 Consequences of teacher appraisal

Teacher appraisal can be a tool to reflect on past work and develop professionally, as well as an accountability mechanism to ensure adequate teacher performance or compliance with professional standards. TALIS asked principals to report on whether each of the following consequences occurs after formal teacher appraisal (Table 3.7).

Changes in compensation are the least common consequences of teacher appraisal. In Australia, only eight per cent of teachers work in schools in which material sanctions (such as reduced annual increases in pay) are imposed. However, 35 per cent of teachers in Singapore work in such schools. Similarly, only 12 per cent of Australian teachers work in schools in which an increase in salary or a bonus is an outcome of appraisal, compared to 67 per cent of teachers in Singapore. While the former option is not often a result of appraisal, the latter is in more countries. In Estonia, 88 per cent of teachers work in schools in which a consequence of appraisal can be a bonus or increased salary. This is also the case for 41 per cent of teachers across the OECD on average, and 53 per cent of those in Finland.

Almost all principals in Australia and across the OECD, reported that appraisal is followed up by a discussion with the teacher. Read in conjunction with Table 3.8, it seems that, in Australia, this occurs “always” in 16 per cent of schools, “most of the time” in 42 per cent of schools, and “sometimes” in a further 42 per cent of schools. In Japan, while 99 per cent of teachers work in schools in which discussions with teachers are a consequence of appraisal, in only one per cent of schools appraisal is “always” followed by a discussion with the teacher of measures to remedy any weaknesses in teaching.

The elaboration of a professional development or training plan is also a frequent consequence of teacher appraisal. Schools where this occurs “sometimes”, “most of the time” or “always” account for 90 per cent of all teachers, on average, across the OECD and 97 per cent of Australian teachers (excluding schools where teacher appraisal does not take place). Twenty-three per cent of Australian teachers, but only two per cent of Japanese teachers, work at schools in which this “always” happens.

TABLE 3.7 Consequences of formal teacher appraisal

Results based on responses of lower secondary principals

	Outcomes of formal teacher appraisal in the school, average number across teachers[1]		Percentage of teachers[2] whose school principals report that the following occurs after a formal teacher appraisal[3]															
			Measures to remedy any weaknesses in teaching are discussed with the teacher		A development/ training plan is developed		Material sanctions, such as reduced annual increases in pay, are imposed		A mentor is appointed to help the teacher improve his/her teaching		A change in a teacher's work responsibilities[4]		An increase in a teacher's salary or payment of a financial bonus		A change in the likelihood of a teacher's career advancement		Dismissal or non-renewal of contract	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia	5	0.0	99	0.0	97	0.0	8	0.0	97	0.0	82	0.1	12	0.1	67	0.1	75	0.1
OECD average-30	5	0.0	98	0.2	90	0.4	15	0.5	71	0.6	70	0.7	41	0.7	53	0.7	51	0.7
TALIS average-47	5	0.0	98	0.2	92	0.3	18	0.4	74	0.5	71	0.5	45	0.5	58	0.6	48	0.5
High-performing PISA countries																		
Alberta (Canada)	5	0.2	99	0.6	97	3.0	11	3.7	95	2.3	70	6.0	16	6.0	62	6.4	81	5.0
Estonia	6	0.1	100	0.3	96	1.5	13	2.5	79	3.0	91	2.0	88	2.6	75	3.8	66	3.9
Finland	5	0.2	97	2.2	89	4.0	0	0.0	50	5.7	82	4.9	53	6.0	39	5.9	76	5.3
Japan	4	0.1	99	0.9	94	1.8	13	2.5	49	3.8	50	3.9	25	3.2	24	3.4	12	2.4
Singapore	7	0.0	100	0.0	100	0.0	35	0.1	100	0.0	95	0.0	67	0.1	89	0.1	74	0.1

[1] "Across teachers" indicates that (for consistency with the other columns of this table) the average number of outcomes of appraisal has been calculated with teacher weights.

[2] Excluding teachers whose school principals reported that their teachers are never formally appraised by any of the sources on which TALIS collects information ("principal"; "other member(s) of the school management team"; "assigned mentors"; "other teachers (not part of the school management team)" or "external individuals or bodies").

[3] Includes principals who reported that the following occurs "sometimes", "most of the time" or "always"; excludes principals who reported that it "never" occurs.

[4] For instance, an increase or decrease in his/her teaching load, administrative/managerial responsibilities or mentor responsibilities.

Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide.

TABLE 3.8 Most common consequences of formal teacher appraisal

Results based on responses of lower secondary principals

	Percentage of teachers[1] whose school principals report that the following occurs after a formal teacher appraisal, by reported frequency															
	Measures to remedy any weaknesses in teaching are discussed with the teacher								A development/training plan is developed							
	Never		Sometimes		Most of the time		Always		Never		Sometimes		Most of the time		Always	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia	1	0.0	42	0.1	42	0.1	16	0.1	3	0.0	43	0.1	31	0.1	23	0.1
OECD average-30	2	0.2	34	0.7	35	0.7	28	0.7	10	0.4	44	0.7	29	0.7	17	0.6
TALIS average-47	2	0.2	29	0.5	36	0.6	33	0.6	8	0.3	41	0.6	32	0.6	19	0.5
High-performing PISA countries																
Alberta (Canada)	1	0.6	22	5.6	30	6.2	47	5.7	3	3.0	40	4.7	30	6.5	27	4.8
Estonia	0	0.3	36	4.1	34	4.1	30	3.5	4	1.5	56	4.0	26	3.3	14	2.9
Finland	3	2.2	67	5.0	19	4.8	11	3.1	11	4.0	47	5.7	27	4.6	14	4.1
Japan	1	0.9	79	3.1	19	3.1	1	0.8	6	1.8	79	3.0	13	2.7	2	1.0
Singapore	0	0.0	9	0.1	44	0.1	48	0.1	0	0.0	22	0.1	45	0.1	32	0.1

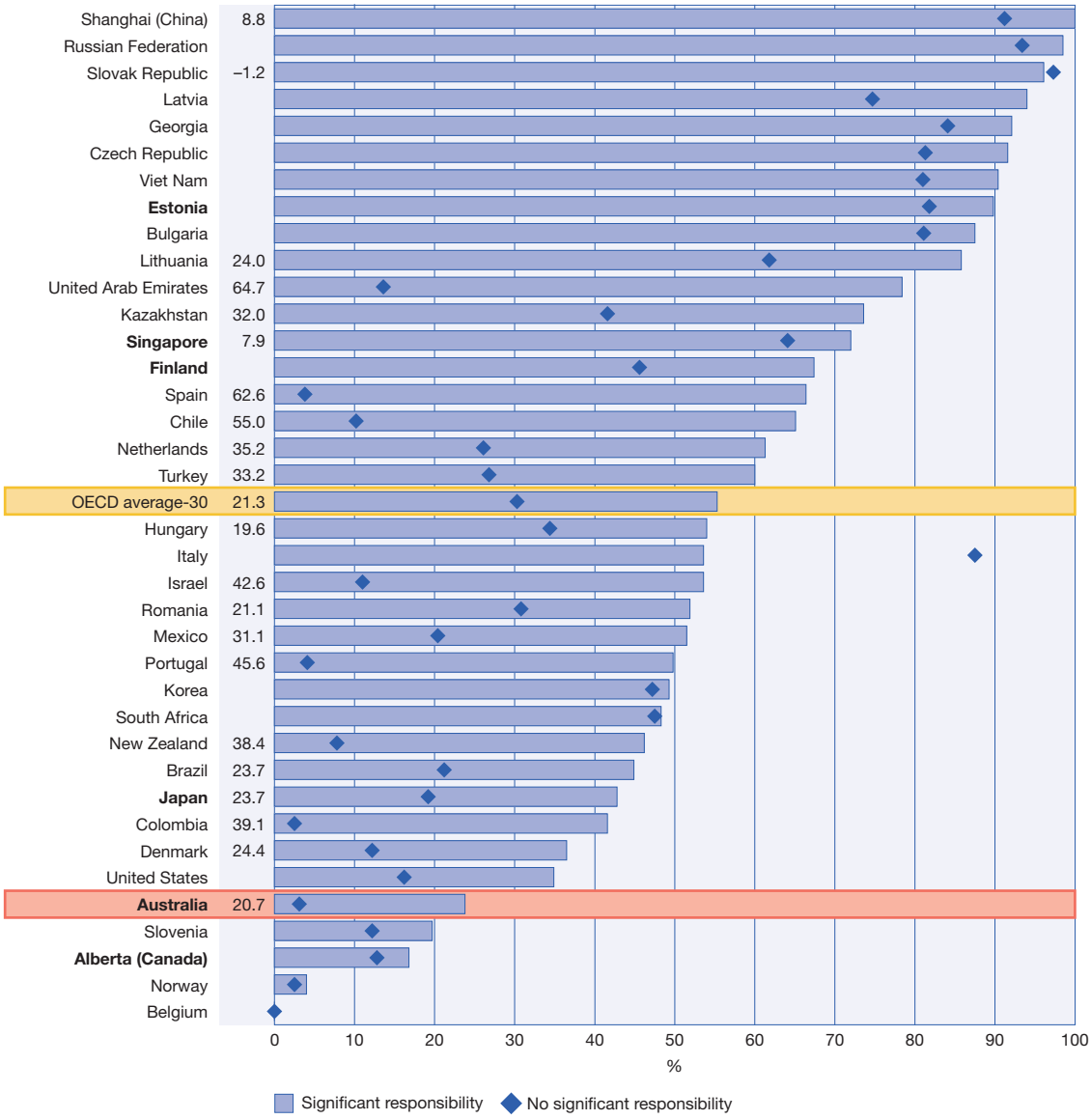
[1] Excluding teachers whose school principals report that their teachers are never formally appraised by any of the sources on which TALIS collects information ("principal"; "other member(s) of the school management team"; "assigned mentors"; "other teachers (not part of the school management team)" or "external individuals or bodies").

Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide.

Teacher appraisal is more likely to result in certain consequences if the school management team has "significant responsibility" for those consequences (that is, if the principal or other members of the school management team play an active role in relevant decision-making). In Australia, the proportion of teachers working in schools where teacher appraisal sometimes results in an increase in a teacher's salary or the payment of a financial bonus is very small, 12 per cent, compared to the average across the OECD of 41 per cent. The proportion is smaller (3%) in schools without "significant responsibility" over the determination of teachers' salary increases, but larger in schools with such responsibility (24%) (Figure 3.7). Similarly, 79 per cent of Australian teachers work in schools where appraisal sometimes results in dismissal or non-renewal of a teacher's contract whenever the school has "significant responsibility" for dismissing or suspending teachers (Table A3.4). This is higher than the OECD average of 60 per cent. Fifty-five per cent of Australian teachers work in schools with consequences of dismissal or non-renewal of contract, even in the case of schools without significant responsibility over those decisions, compared to the average over the OECD of 28 per cent.

FIGURE 3.7 Consequences of appraisal on teachers' salaries, by school management responsibility over the determination of teachers' salary increases

Percentage of lower secondary teachers[1] whose school principals report that their teachers' formal appraisal results[2] in an increase in a teacher's salary or payment of a financial bonus, by school management responsibility[3] on related matters



[1] Excluding teachers whose school principal reports that their teachers are never formally appraised by any of the sources on which TALIS collects information ("principal"; "other member(s) of the school management team"; "assigned mentors"; "other teachers (not part of the school management team)" or "external individuals or bodies").

[2] "Sometimes", "Most of the time" or "Always".

[3] The principal or other members of the school management team play (or do not play) an active role in decision-making relevant to the determination of teachers' salary increases.

Notes: Statistically significant differences are shown next to the country/economy name. High-performing PISA countries in bold. For explanation refer to Reader's Guide.

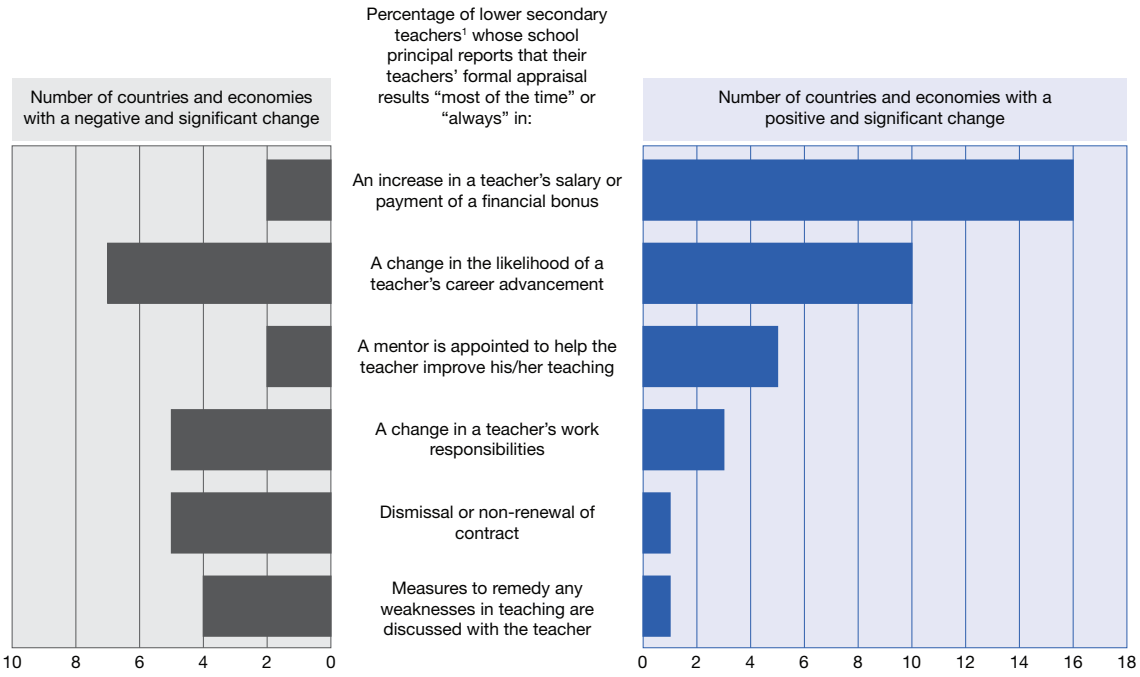
Both an increase in a teacher's salary and dismissal or non-renewal of a teacher's contract occur more often as a consequence of teacher appraisal in privately managed schools than in publicly managed schools, on average across the OECD (Table A3.5). This is also the case in Australia, although the differences are much smaller between school sectors than they are on average across the OECD. There is no significant difference across the OECD between less advantaged schools (those with over 30% of students from socioeconomically disadvantaged homes, according to principals), between schools with a higher concentration of immigrant students (those with more than 10% of immigrant students), and those schools with a higher concentration of students with

special needs (those with more than 10% special needs students), and other schools, on average across OECD countries.

This is not the case in Australia. Both consequences of appraisal, an increase in salary or bonus or dismissal or non-renewal of a contract, were more often reported in privately managed schools, in schools with a lower level of socioeconomic disadvantage, with a lower concentration of immigrant students, and with a lower concentration of students with special needs.

The consequences of teacher appraisal have changed across TALIS countries and economies. Between 2013 and 2018, in all education systems with available data (including Australia) except for Croatia, Finland and France, there was a significant change in the occurrence across schools of at least one of the consequences discussed in this section. The areas that have seen most changes across TALIS participating countries and economies are the tying of appraisal results to financial rewards and career advancement (Figure 3.8). In Australia, the only significant difference between TALIS 2013 and 2018 was a decline in the reporting for the consequence of appraisal as "a change in the likelihood of a teacher's career advancement".

FIGURE 3.8 Change in the consequences of teacher appraisal from 2013 to 2018
Results based on responses of lower secondary principals



[1] Excluding teachers whose school principal reports that their teachers are never formally appraised by any of the sources on which TALIS collects information ("principal"; "other member(s) of the school management team"; "assigned mentors"; "other teachers (not part of the school management team)" or "external individuals or bodies").

BOX 3.2 Formal teacher appraisal, from primary to lower secondary education

Frequency and sources of formal teacher appraisal

Only a small proportion of teachers in Australian primary schools (6%, see Table A3.7) work in schools where their principals reported that teachers are never formally appraised. The most common sources of formal appraisal for primary teachers are the school principal (74%) and other members of the school management team (78%).

Methods of teacher appraisal

There were only two significant differences between the methods of appraisal for primary and lower secondary teachers. The proportion of teachers in schools in which teachers are appraised through student surveys is significantly lower in Australian primary schools (84%) than in lower secondary schools (91%) (Table A3.8). Conversely, more primary teachers (69%) than lower secondary teachers (60%) work in schools in which assessment of teacher content knowledge is used as teacher appraisal.

Consequences of teacher appraisal

Teacher appraisal results in similar consequences for primary teachers and lower secondary teachers in Australia (Table A3.9). A lower percentage of primary teachers than lower secondary teachers work in schools in which consequences of formal appraisal are "a change in a teacher's work responsibilities" (73% of primary teachers compared to 82% of lower secondary teachers), a change in the likelihood of a teacher's career advancement" (49% compared to 67%), or "dismissal or non-renewal of contract" (61% compared to 75%).

3.4 Teachers' and principals' satisfaction with salary and other terms of employment

3.4.1 Satisfaction with salary among teachers and principals

TALIS asks teachers and principals to report the extent to which they agree (*strongly disagree*; *disagree*; *agree*; or *strongly agree*) with the statement that they are satisfied with the salary they receive. Australian teachers and principals agree with this to a much greater extent than across the OECD, on average. Sixty-seven per cent of Australian teachers and 74 per cent of principals agree or strongly agree that they are satisfied with their salary in 2018, compared to 39 per cent of teachers and 47 per cent of principals on average across the OECD.

Within many OECD countries there is variation among teachers in satisfaction with salary, and there is little consistency across the high-performing PISA countries (Table 3.9). Teachers in Alberta (Canada) were the most satisfied with their salaries (76% satisfied), while teachers in Estonia, Japan and Finland were the least (39%, 42%, and 45% respectively). There were significant gender differences in Alberta (Canada), Japan, and across the OECD on average, where males were much less satisfied with their salary than females, and in Estonia and Finland, where females were less satisfied than males. Across the OECD on average, older teachers were less satisfied with their salaries than younger teachers. This was also the case in Estonia and Finland, but the opposite was true in Alberta (Canada) and Singapore.

TABLE 3.9 Teachers' satisfaction with their salaries, by teacher characteristics

Results based on responses of lower secondary teachers

	Percentage of teachers who "agree" or "strongly agree" that they are satisfied with the salary they receive for their work																		
	Total		By gender						By age						By number of years of teaching experience					
			Male		Female		Male - Female		Under age 30 (a)		Age 50 and above (b)		(b) - (a)		Less than or equal to 5 years (a)		More than 5 years (b)		(b) - (a)	
	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	67	1.0	66	1.8	67	1.1	-1	2.1	67	2.6	66	2.0	-1	3.4	64	2.4	68	1.1	4	2.6
OECD average-31	39	0.2	38	0.4	40	0.3	**-2**	0.4	46	0.7	38	0.4	**-7**	0.8	43	0.5	39	0.2	**-5**	0.6
TALIS average-48	39	0.2	39	0.3	40	0.2	**-1**	0.3	44	0.5	39	0.3	**-4**	0.6	42	0.4	39	0.2	**-4**	0.4
High-performing PISA countries																				
Alberta (Canada)	76	2.2	68	3.6	80	2.1	**-12**	3.5	67	3.9	79	4.0	**12**	5.1	71	3.4	78	2.3	**7**	3.3
Estonia	39	1.2	45	2.6	38	1.3	**7**	2.8	55	4.2	33	1.4	**-21**	4.1	55	3.5	36	1.2	**-19**	3.6
Finland	45	1.3	48	1.8	44	1.5	**5**	1.9	57	4.2	42	2.1	**-15**	4.7	50	2.8	44	1.5	-6	3.3
Japan	42	1.1	36	1.2	50	1.6	**-14**	1.8	40	2.0	41	1.8	1	2.5	44	1.9	41	1.2	-3	2.1
Singapore	72	0.8	72	1.3	72	1.0	1	1.5	69	1.6	83	1.9	**14**	2.3	67	1.5	74	1.0	**7**	1.8

Notes: Statistically significant differences are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

In Australia, across the OECD on average, and in Finland, Japan and Singapore, the percentage of teachers reporting that they are satisfied with their salaries is higher in privately managed schools than in publicly managed schools (Table 3.10). TALIS data provides some evidence that satisfaction with salaries among teachers in schools with a high concentration of disadvantaged students is lower in Australia than among teachers at less disadvantaged schools (by 7 percentage points). While there is no difference on average over the OECD, in Alberta (Canada) and Estonia a significantly larger percentage of teachers at more disadvantaged schools than at other schools indicated that they are satisfied with their salary. Australia is the only country in this comparison in which teachers at schools with a higher concentration of immigrant students are less satisfied with their salary than teachers at other schools.

TABLE 3.10 Teachers' satisfaction with their salaries, by school characteristics

Results based on responses of lower secondary teachers and principals

	Percentage of lower secondary teachers who "agree" or "strongly agree" that they are satisfied with the salary they receive for their work																	
	By school type						By concentration of students from socioeconomically disadvantaged homes[1]						By concentration of immigrant students[2]					
	Publicly managed schools[3]		Privately managed schools[4]		Private - Public		Less than or equal to 30% (a)		More than 30% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)	
	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	62	1.2	71	1.9	**9**	2.4	69	1.3	61	1.8	**-7**	2.2	68	1.4	65	1.4	**-4**	1.9
OECD average-31	38	0.3	46	1.0	**6**	1.0	40	0.3	42	0.6	0	0.8	40	0.3	44	0.6	-1	0.7
TALIS average-48	39	0.2	46	0.8	**5**	0.8	40	0.3	41	0.6	0	0.7	39	0.2	45	0.6	-1	0.7
High-performing PISA countries																		
Alberta (Canada)	76	2.1	c	c	c	c	75	2.4	89	3.2	**14**	3.9	73	3.3	79	2.5	6	4.1
Estonia	39	1.2	37	5.7	-2	5.8	39	1.2	50	5.3	**11**	5.3	39	1.2	c	c	c	c
Finland	45	1.4	58	3.5	**14**	4.0	45	1.4	c	c	c	c	46	1.5	44	2.6	-2	3.0
Japan	40	1.1	52	4.5	**12**	4.6	42	1.1	43	5.0	1	5.1	42	1.1	c	c	c	c
Singapore	71	0.9	80	2.2	**9**	2.3	72	0.9	c	c	c	c	72	1.1	72	1.3	0	1.7

[1] "Socioeconomically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care.

[2] "Immigrant students" refers to "students who are immigrants or with a migrant background", as reported by the school principal. An "immigrant student" is one who was born outside the country. A "student with a migrant background" has parents who were both born outside the country.

[3] A publicly managed school is a school whose principal reported that it is managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise. In the Principal Questionnaire, this question does not make any reference to the source of the school's funding which is reported in the preceding question.

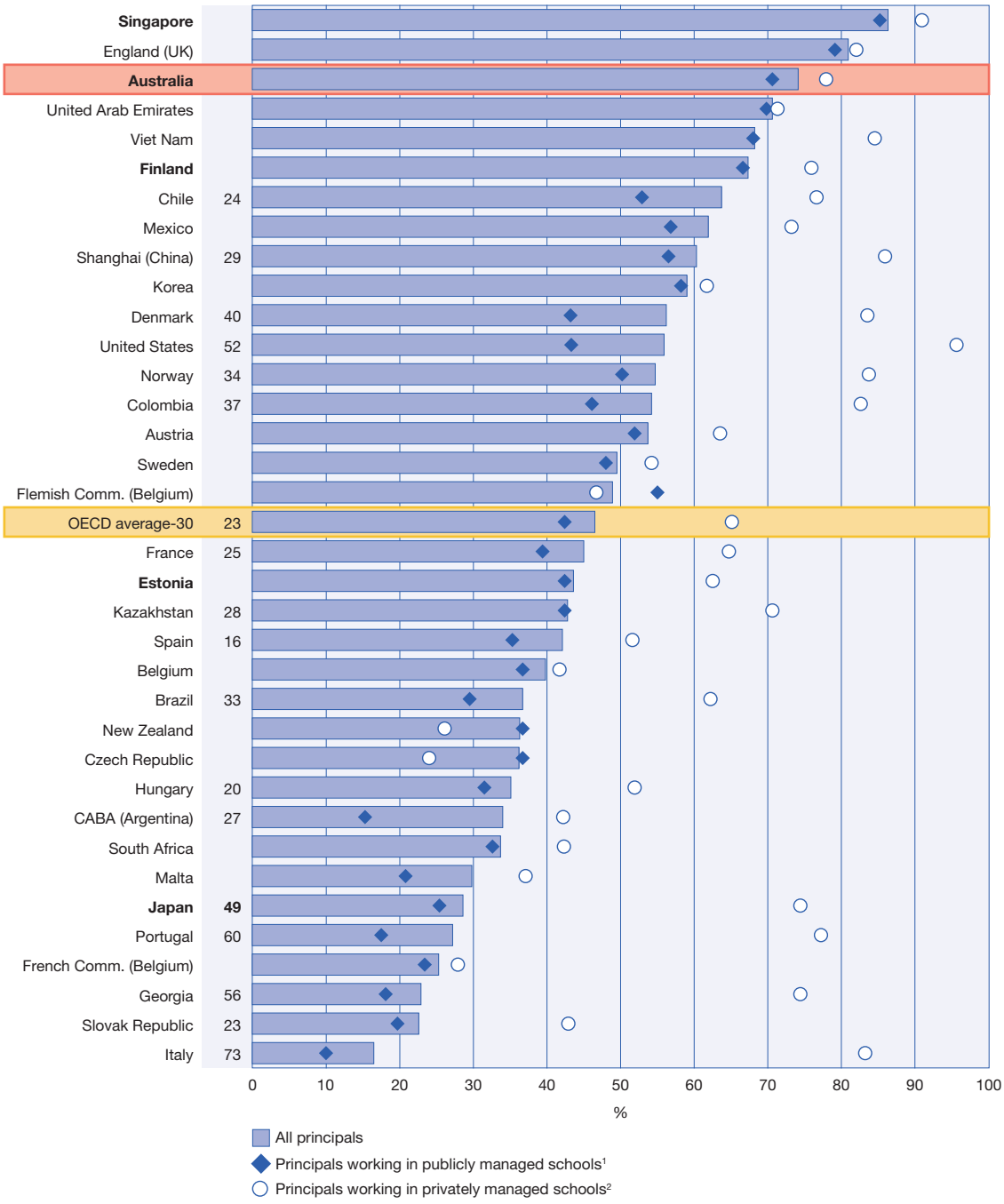
[4] A privately managed school is a school whose principal reported that it is managed by a non-governmental organisation (e.g. a church, trade union, business or other private institution). In the Principal Questionnaire, this question does not make any reference to the source of the school's funding, which is reported in the preceding question. In some countries, the privately managed schools category includes schools that receive significant funding from the government (government-dependent private schools).

Notes: Statistically significant differences are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

Australian principals recorded the third-highest level of satisfaction with salary, with 74 per cent reporting this compared to 47 per cent across the OECD on average. Principals' satisfaction with salary can vary significantly between those in privately managed schools and those in publicly managed schools (Figure 3.9). Across the OECD on average the percentage of principals who reported being satisfied with their salary is significantly higher in privately managed schools (65%) than in publicly managed schools (42%). However, in Australia there was no significant difference. There were also no significant differences found in the levels of satisfaction for Australian principals in schools with large concentrations of disadvantaged students, nor in those schools with high concentrations of immigrant students.

FIGURE 3.9 Lower secondary principals' satisfaction with salary, by school type

Results based on responses of lower secondary principals



[1] A publicly managed school is a school whose principal reported that it is managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise.

[2] A privately managed school is a school whose principal reported that it is managed by a non-governmental organisation (e.g. a church, trade union, business or other private institution).

Notes: Statistically significant differences between principals working in publicly managed schools and principals working in privately managed schools are shown next to the country/economy name. (In the Principal Questionnaire, this question does not make any reference to the source of the school's funding which is reported in the preceding question.). High-performing PISA countries in bold. For explanation refer to Reader's Guide.

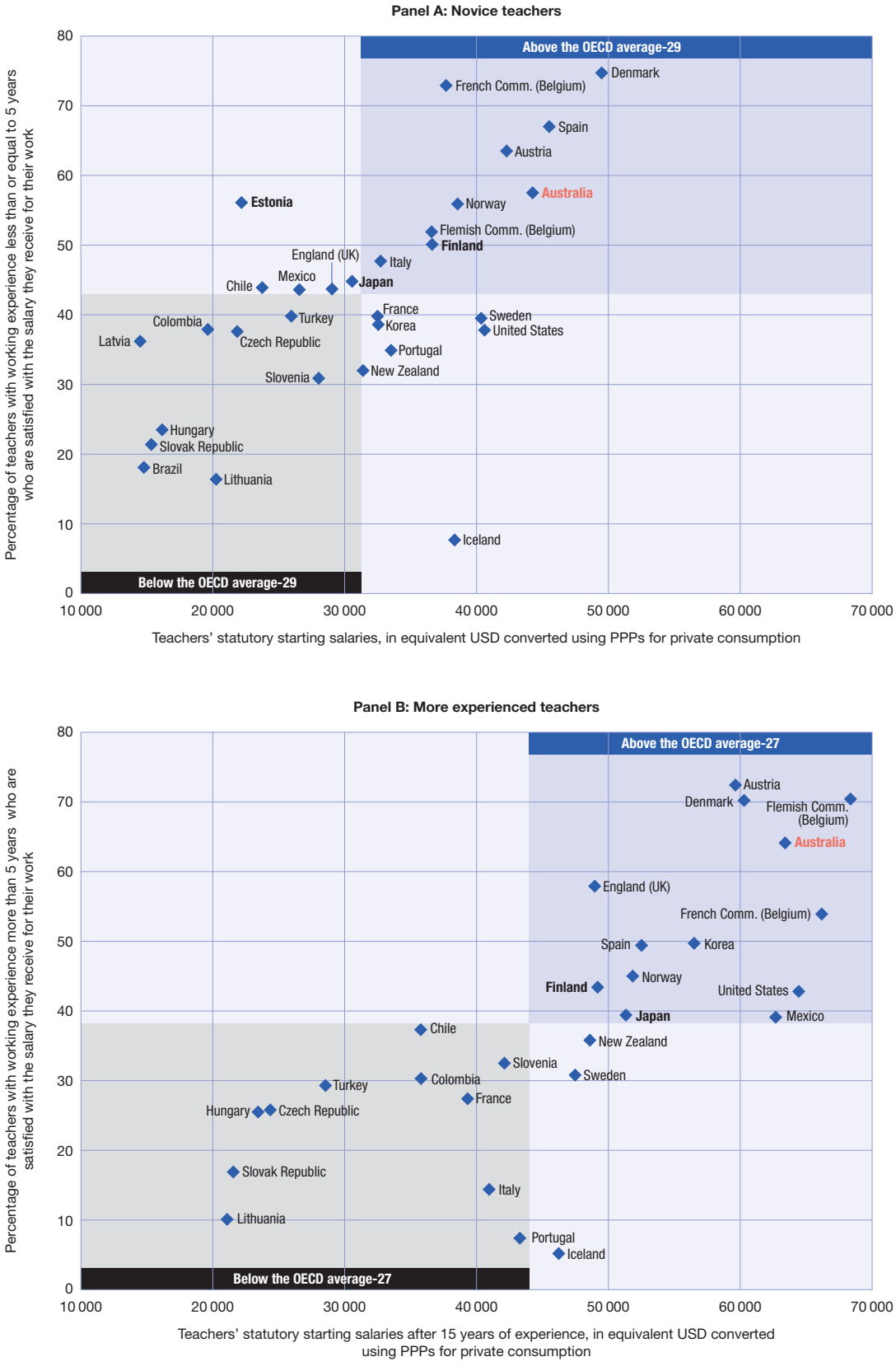
The TALIS data on satisfaction with salaries is also compared with data on the statutory salaries of teachers and principals available through other OECD data collections and reported in Education at a Glance (OECD, 2018). The analysis presented in this section of the report makes use of the statutory annual gross salary (purchasing power parity adjusted and excluding bonuses and allowances) of lower secondary full-time teachers and principals in general programs in public institutions in 2018.

Figure 3.10 shows the relationship between the statutory starting salaries for teachers and the percentage of teachers who are satisfied with their salary, in the top panel for novice teachers (that is, with five years or less work experience) and the bottom panel for more experienced teachers. Across education systems, there is a strong positive association between the proportion of novice teachers who are satisfied with their salary and the amount of that salary. Relative to other countries in TALIS, the starting salaries for Australian teachers is high, and almost 60 per cent of novice teachers expressed satisfaction with this. Estonia is the only country for which this relationship does not hold. The starting salaries in Estonia are substantially lower than the OECD average, and yet 56 per cent of novice teachers express satisfaction with their salary.

In Australia, a higher proportion of experienced teachers than novice teachers expressed satisfaction with their salaries. Australia is also one of the few countries in TALIS in which statutory salaries increased by more than 25 per cent from starting salary after 15 years.

FIGURE 3.10 Teachers' statutory salary and salary satisfaction, by work experience

Results based on responses of lower secondary teachers[1]



[1] Data for statutory salaries refer to teachers in lower secondary general programmes in public institutions.

Notes: Panel A shows only countries and economies with available data for starting teachers in lower secondary general programmes and percentage of teachers with less than or equal to 5 years of teaching experience who are satisfied with the salary they receive for their work. Panel B shows only countries and economies with available data for teachers after 15 years of experience in lower secondary general programmes and percentage of teachers with more than 5 years of teaching experience who are satisfied with the salary they receive for their work. The OECD average-29 includes all TALIS 2018 OECD countries and economies, with the exception of Alberta (Canada), Belgium, Israel, and the Netherlands; while the OECD average-27 includes all TALIS 2018 OECD countries and economies, with the exception of Alberta (Canada), Belgium, Estonia, Israel, Latvia and the Netherlands. High-performing PISA countries in bold. For explanation refer to Reader's Guide.

3.4.2 Satisfaction with other terms of employment among teachers and principals

TALIS also asks about the extent to which, apart from their salaries, teachers are satisfied with the terms of their teaching contract or employment (for example, employment benefits, work schedule) (Table A3.10). In Australia, 78 per cent of teachers reported that they are satisfied with their terms of employment. This indicates that teachers tend to be more satisfied with their general terms of employment than with their salaries (67%). On average across the OECD, 66 per cent of teachers expressed general satisfaction with their general terms of employment, a much higher level than those who expressed satisfaction with their salaries (39%).

Australian principals were similarly satisfied with their working conditions, with 84 per cent expressing satisfaction with their other terms of employment (Table A3.11).

BOX 3.3 Teachers' and principals' satisfaction with their salaries and with the other terms of their contract or employment, from primary to lower secondary education

Across primary schools in Australia, 63 per cent of teachers expressed satisfaction with their salary (Table A3.12). This was not substantially different to the 67 per cent of lower secondary teachers who expressed similar levels of satisfaction. A similar proportion of primary (79%) and lower secondary teachers (78%) expressed satisfaction with their general terms of employment.

Similarly, primary principals were equally satisfied as lower secondary principals, with 69 per cent expressing satisfaction with their salaries, and 75 per cent expressing satisfaction with their other terms of employment.

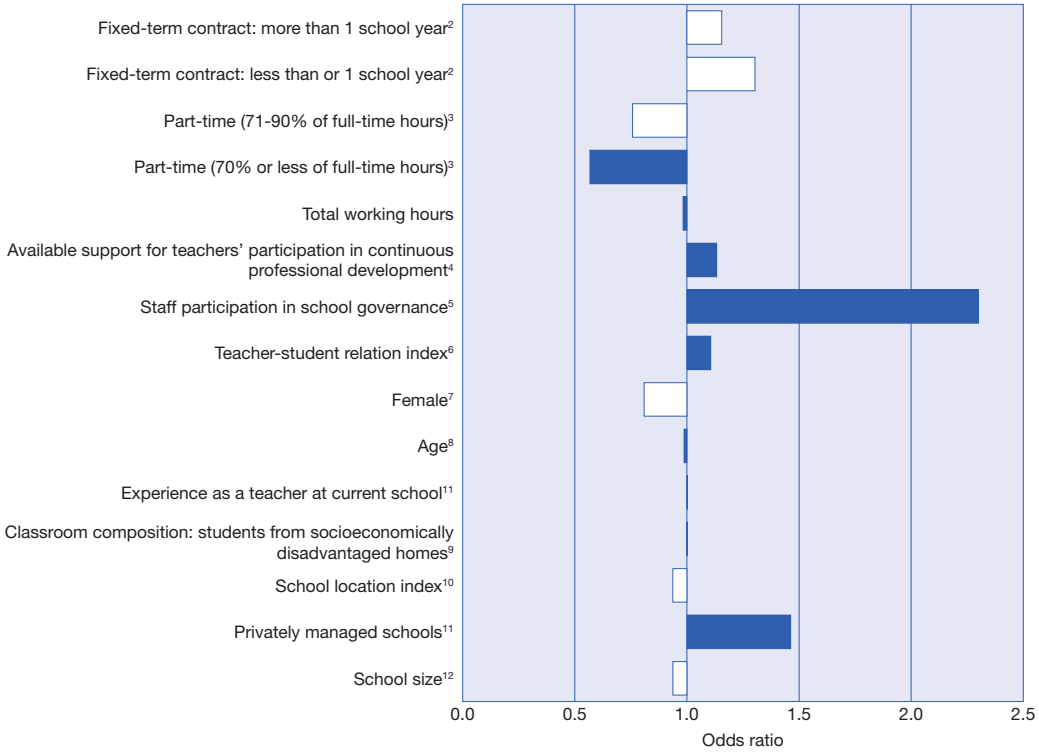
Teachers' satisfaction with their terms of employment could also be related to other benefits and conditions of their job. For example, it could be affected by the support teachers receive for continuous professional development, including material support such as reimbursements, provision of material and salary. The OECD (2020) also suggest that teachers' satisfaction could also be related to the opportunities teachers have to shape their work environment through participation in school governance.

Logistic regression analyses were conducted to examine how teachers' propensity to report being satisfied with their terms of employment is related to working on fixed-term contracts (either less than one year or of longer duration) or working part-time (between 71% and 90% of full-time hours or less than that). In addition, among the independent variables included were: 1) the number of forms of support for continuous professional development that teachers report receiving in the 12 months prior to the survey; and 2) an indicator of teacher participation in school governance. Finally, the total number of reported working hours in the week prior to the survey and a set of teacher and school characteristics were included as control variables. The results of this analysis for Australia are shown in Figure 3.11.

For Australian teachers, working part-time (70% or less of full-time hours) was negatively associated with teachers' satisfaction with their terms of employment (compared to working full-time). Total working hours is also negatively associated with satisfaction; teachers are less satisfied the longer their working hours. In contrast, both support for professional development and strong teacher-student relationships had positive associations with satisfaction. The strongest positive relationship is found for participation in school governance. These results indicate that teachers' satisfaction with their terms of employment is more strongly associated with the support they receive for continuous professional development and their participation in the governance of the school than it is with specific contractual arrangements such as fixed-term or part-time work.

FIGURE 3.11 Relationship between Australian teachers' satisfaction with the terms of their teaching contract/ employment and teacher and school characteristics[1]

Results based on responses of lower secondary teachers



[1] An odds ratio indicates the degree to which an explanatory variable is associated with a categorical outcome variable. An odds ratio below one denotes a negative association; an odds ratio above one indicates a positive association; and an odds ratio of one means that there is no association.

[2] Dummy variable: the reference category is "disagree" or "strongly disagree" with the statement "Apart from my salary, I am satisfied with the terms of my teaching contract/employment (e.g. benefits, work schedule)".

[3] Dummy variable: the reference category is working in permanent employment, i.e. with an ongoing contract with no fixed end-point before the age of retirement.

[4] Dummy variable: the reference category is working full-time (more than 90% of full-time hours).

[5] Number of forms of support for continuous professional development that teachers report receiving in the 12 months prior to the survey. Teachers could report receiving any of eight forms of support for continuous professional development: "reimbursement or payment of costs"; "monetary supplements for activities outside of the working hours"; "increased salary"; "release from teaching duties for activities during regular working hours"; "non-monetary support for activities outside working hours"; "material needed for the activities"; "non-monetary rewards"; and "non-monetary professional benefits".

[6] Binary categorical variable equal to 1 if teachers "agree" or "strongly agree" with at least one of two statements on participation in school governance ("this school provides staff with opportunities to actively participate in school decisions" and "this school encourages staff to lead new initiatives")

[7] The teacher-student relation index measures the quality of the relationship between teachers and students.

[8] Dummy variable: the reference category is male.

[9] Number of years.

[10] Central values of the percentage ranges: 0%, 5%, 20%, 45% or 80%. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

[11] Ordinal categorical variable: 0=Rural area or village (up to 3 000 people), 1=Town (3 001 to 100 000 people); 2=City (over 100 000 people).

[12] Dummy variable: the reference category is publicly managed school.

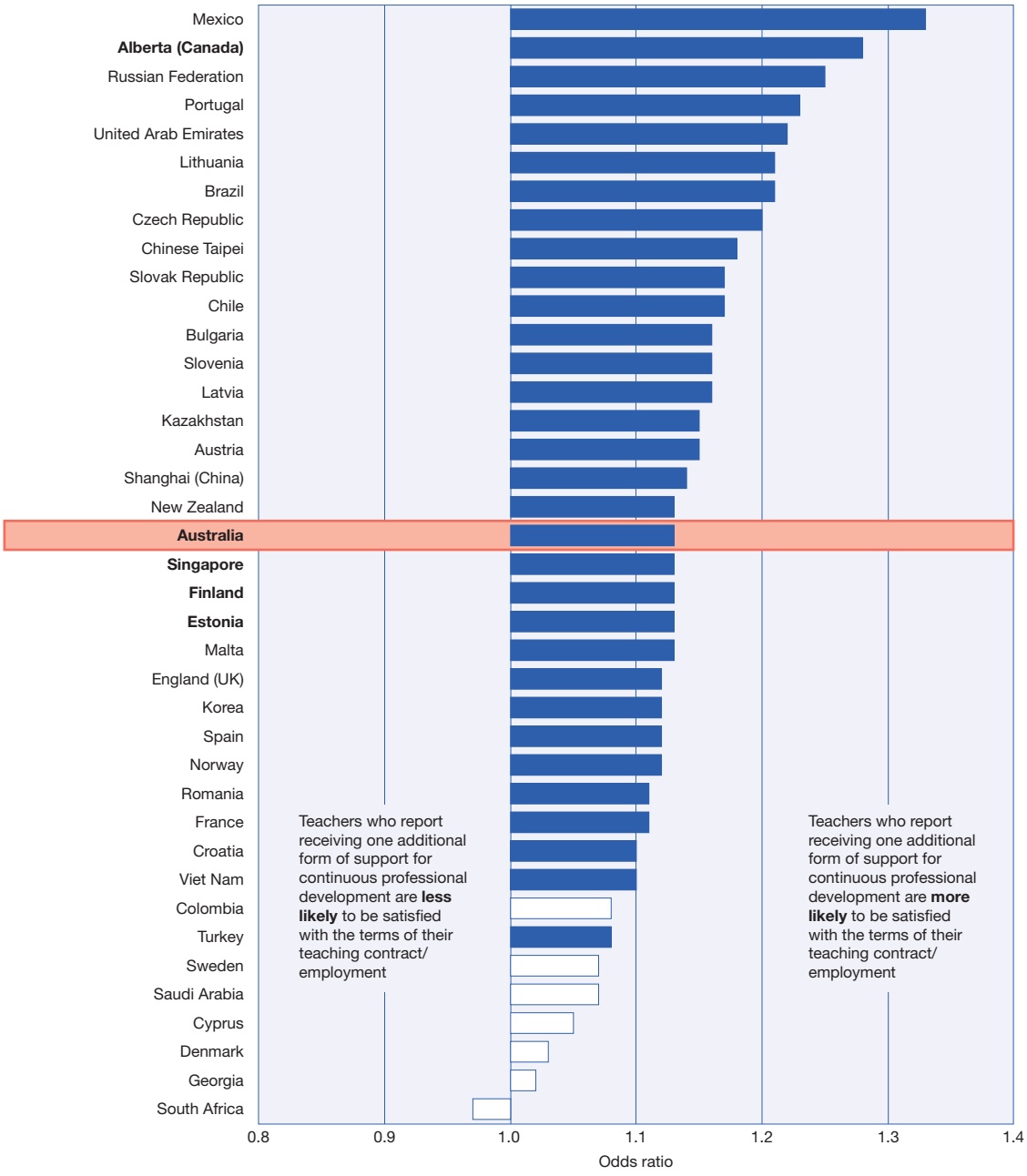
[13] Number of students (natural logarithm).

Note: Statistically significant coefficients are marked in a darker tone.

Figure 3.12 shows the relationship between teachers' participation in continuous professional development and their satisfaction with their terms of employment internationally. In Australia, as well as the high-performing PISA countries of Alberta (Canada), Singapore, Finland, and Estonia (Japan is not included in this analysis), the relationship is positive and significant.

FIGURE 3.12 Relationship between teachers' satisfaction with the terms of their employment and support for teachers' continuous professional development

Likelihood of being satisfied with the terms of their teaching contract/employment (apart from salary), related to available support for teachers' participation in continuous professional development[1, 2, 3, 4, 5]



[1] Results of binary logistic regression based on responses of lower secondary teachers and principals. As the predictor is a continuous variable the relationship refers to the marginal effect of one additional available support for teachers' participation in continuous professional development on the likelihood of being satisfied with the terms of their teaching contract/employment.

[2] An odds ratio indicates the degree to which an explanatory variable is associated with a categorical outcome variable. An odds ratio below one denotes a negative association; an odds ratio above one indicates a positive association; and an odds ratio of one means that there is no association.

[3] The predictor is a continuous variable: it refers to the available support for teachers' participation in continuous professional development (number of forms of support for continuous professional development that teachers reported receiving in the 12 months prior to the survey. Teachers could report receiving any of eight forms of support for continuous professional development: "reimbursement or payment of costs"; "monetary supplements for activities outside of the working hours"; "increased salary"; "release from teaching duties for activities during regular working hours"; "non-monetary support for activities outside working hours"; "material needed for the activities"; "non-monetary rewards"; and "non-monetary professional benefits").

[4] The administration of this question on mechanisms to support participation in continuous professional development was optional for TALIS countries and economies. Of the participating countries and economies, 43 took this option. Therefore, the OECD average is not displayed in the chart.

[5] Controlling for the following teacher characteristics: gender, age, years of experience as a teacher at current school, working full-time; classroom composition: students from socioeconomically disadvantaged homes; and school characteristics: school location index, school type and school size.

Notes: Statistically significant coefficients are marked in a darker tone. High-performing PISA countries in bold. For explanation refer to Reader's Guide.

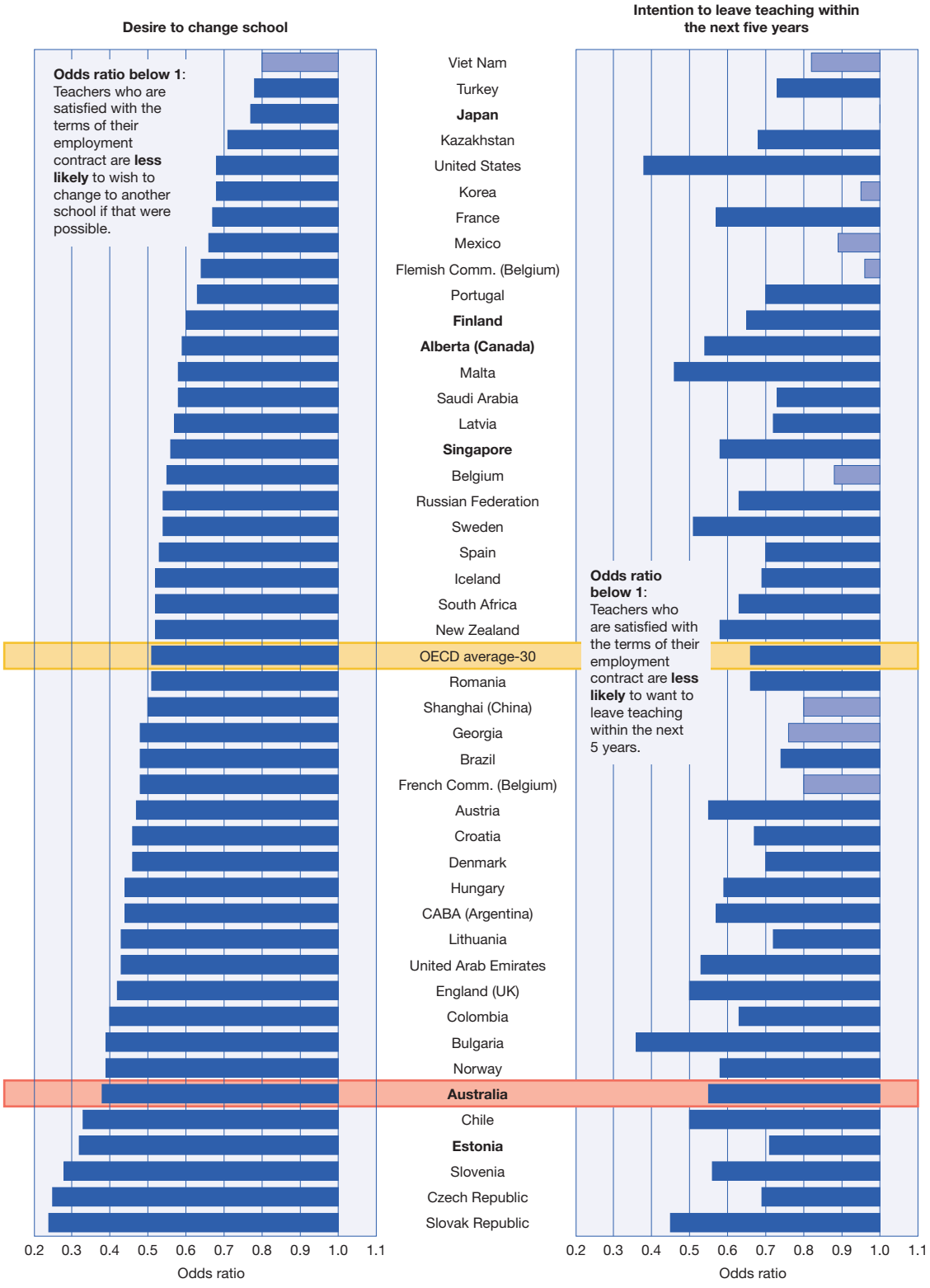
3.4.3 How teachers' satisfaction with salary and terms of employment are related to teacher retention

Retaining teachers is important for the teaching workforce but also for maintaining and improving quality teaching, as both general and school-specific teaching experience are found, in the literature, to be positively associated with student learning. Improving teachers' salaries and terms of employment can be used by education authorities as a policy tool with the aim of retaining teachers (OECD, 2020).

In Australia and on average across the OECD, teachers' satisfaction with the terms of their employment contract is significantly and negatively associated with the desire to change to another school and with the intention to leave teaching within the next five years (Figure 3.13), after controlling for a variety of teacher and school characteristics. This suggests that teachers who are satisfied with their terms of employment are more likely than others to want to continue working as teachers, and to do so in the same school.

FIGURE 3.13 Relationship between the desire to change school and intention to leave teaching within the next five years and satisfaction with the terms of the employment contract

Likelihood of desiring to change school and intention to leave teaching within the next five years related to satisfaction with the terms of their employment contract[1,2,3,4]



[1] Results of binary logistic regression based on responses of lower secondary teachers and principals.

[2] An odds ratio indicates the degree to which an explanatory variable is associated with a categorical outcome variable. An odds ratio below one denotes a negative association; an odds ratio above one indicates a positive association; and an odds ratio of one means that there is no association.

[3] The predictor is a dummy variable: the reference category refers to not being satisfied with other terms of their teaching contract/employment ("Disagree" or "Strongly disagree").

[4] Controlling for the following: teacher characteristics (gender, age, years of experience as a teacher at current school, working full-time); classroom composition (students from socioeconomically disadvantaged homes); and school characteristics (school location index, school type and school size).

Notes: Statistically significant coefficients are marked in a darker tone. High-performing PISA countries in bold. For explanation refer to Reader's Guide.

CHAPTER 4

Fostering collaboration to improve professionalism

Key findings

- Australian teachers reported participating in activities for exchange and co-ordination for teaching, such as discussions about the learning development of specific students (80% doing this at least once a month) and exchanging teaching materials with colleagues (78% doing so at least once a month), more frequently than professional collaboration activities.
- Even so, 39 per cent of Australian teachers participated in collaborative professional learning at least once a month, compared to 21 per cent across OECD countries on average.
- Eleven per cent of Australian teachers observed colleagues' classes and provided feedback at least once a month, which was higher than the OECD average (9%).
- In Australia, and most other TALIS countries, teachers who reported engaging in professional collaboration with their colleagues more often also reported higher levels of job satisfaction, higher levels of self-efficacy and greater use of cognitive activation strategies in their teaching (after controlling for factors such as teachers' age, gender, years of experience and employment status).
- In TALIS 2018, higher proportions of teachers agreed that their schools had a culture of shared responsibility or a collaborative culture characterised by mutual support than did so in TALIS 2013.
- The majority of Australian teachers who had received feedback indicated that it was useful and had improved their teaching (77%), which was higher than the OECD average of 71 per cent.

4.1 Introduction

This chapter describes the different ways in which teachers collaborate in classrooms, schools and during professional development. It explores how often teachers engage in collaborative activities and how that shapes the wider dimensions of the teaching profession, such as expertise and job satisfaction. It further examines teachers' collegiality and the quality of interpersonal relationships between colleagues in schools, which provide the basis for a collaborative working environment. The second part of the chapter discusses feedback received by teachers, a unique form of collaboration, examining how specific types of feedback can help teachers to improve their practices.

4.2 How do teachers collaborate?

This section attempts to identify the different opportunities for collaboration among teachers, how often these opportunities are leveraged and how these collaborative activities shape different dimensions of the work of teaching. It goes on to explore the role of school leaders in fostering collaboration.

4.2.1 Collaborative activities of teachers

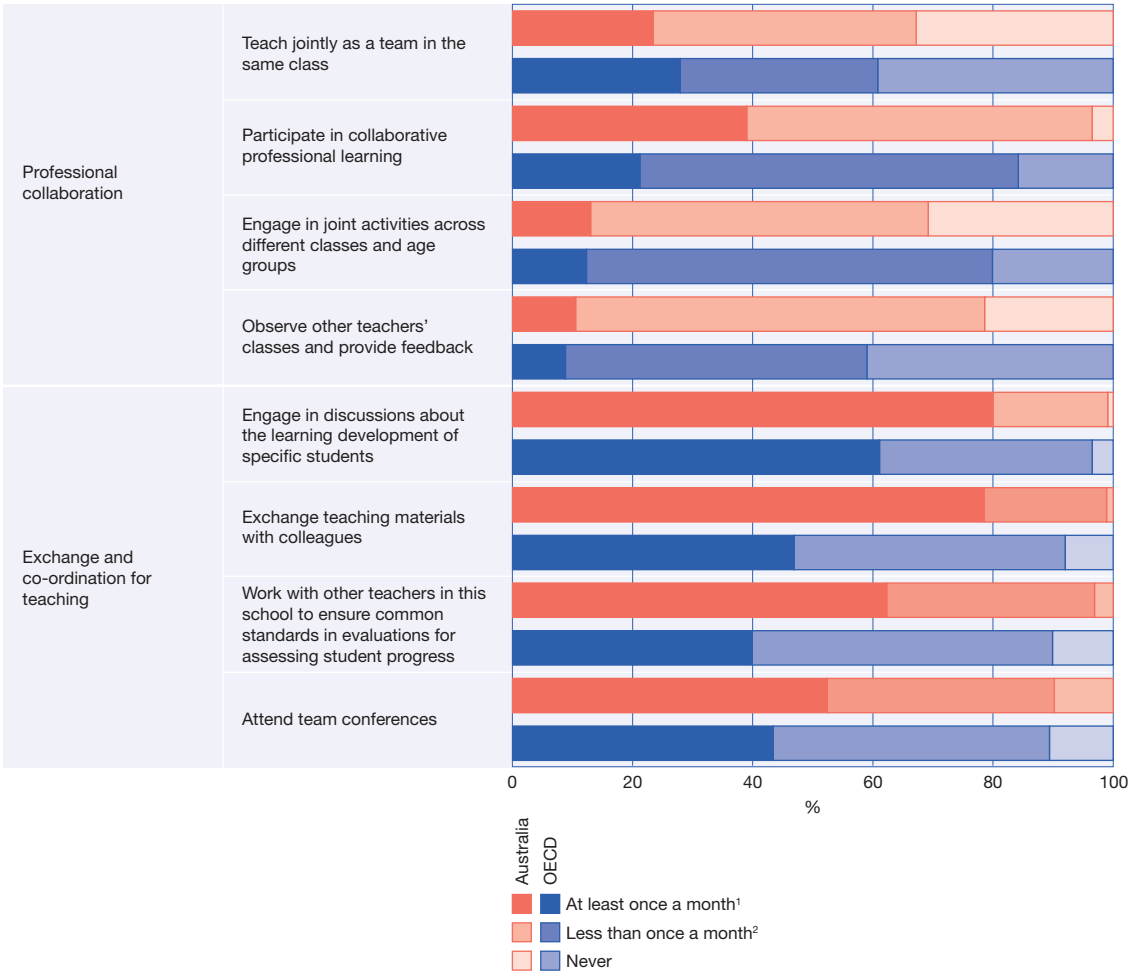
Teachers indicated how often (*never*, *less often than once a month*, *at least once a month*) they participated in one of the following activities:

- Teach jointly as a team in the same class
- Observe other teachers' classes and provide feedback
- Engage in joint activities across different classes and age groups
- Participate in collaborative professional learning
- Exchange teaching materials with colleagues
- Engage in discussion about the learning development of specific students
- Work with other teachers in the school to ensure common standards in evaluations for assessing student progress
- Attend team conferences.

These activities were then grouped based on the nature of the collaboration involved, with deeper forms of collaboration (the first three activities listed above) labelled *professional collaboration* and the other activities (which may involve simple exchanges or co-ordination) labelled as *exchange* and *co-ordination for teaching*. The frequency with which Australian teachers reported participating in each of the collaborative activities is compared with the frequency reported by their peers across OECD countries, on average, in Figure 4.1.

FIGURE 4.1 Teachers' collaboration with colleagues

Percentage of lower secondary teachers who reported engaging in the following collaborative activities in their school with the following frequency (Australia and OECD average)



[1] "At least once a month" covers the following response options: "1-3 times a month", "Once a week or more".

[2] "Less than once a month" covers the following response options: "Once a year or less", "2-4 times a year", "5-10 times a year".

Australian teachers reported participating in activities for exchange and co-ordination for teaching, such as discussions about the learning development of specific students (80% doing this at least once a month) and exchanging teaching materials with colleagues (78% doing so at least once a month), more frequently than professional collaboration activities. This was similar to the pattern across OECD countries, on average.

Higher proportions of Australian teachers, compared to those across the OECD on average, participated in many of the targeted collaborative activities at least once a month. The exceptions to this were participating in team-teaching (with a higher proportion of teachers across the OECD on average doing this at least once a month compared to Australian teachers), and engaging in joint activities across different class and age groups, where the proportions of teachers participating in this activity at least once a month were statistically similar.

BOX 4.1 Collaboration among Australian primary and lower secondary teachers

Some forms of collaboration were more common among Australian primary teachers than among those teaching in lower secondary school. The proportion of Australian primary teachers who taught as a team at least once a month, for example, was significantly higher than the proportion of lower secondary teachers who reported this form of collaboration (Table A4.1). In fact, all of the activities categorised as *professional collaboration* were more frequently reported by primary teachers than by lower secondary teachers, as was participation in collaborative professional learning.

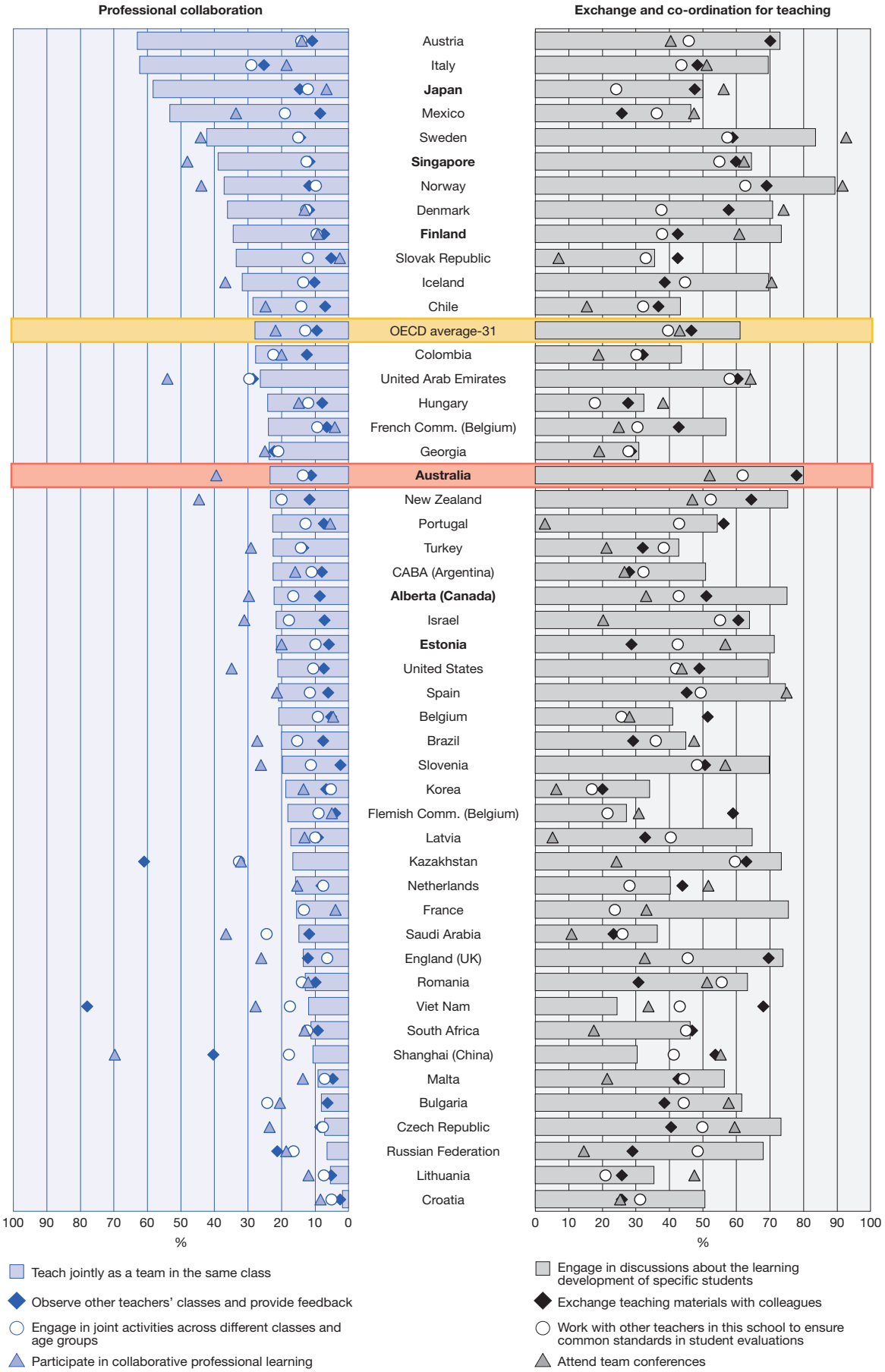
Forty per cent of Australian primary teachers reported teaching as a team (in the same classroom) at least once a month or more, which was substantially higher than the 23 per cent of Australian lower secondary teachers who taught as a team with the same frequency.

Figure 4.2 presents the proportion of teachers who participated in the targeted collaborative activities at least once a month across all TALIS countries. Focusing on professional collaboration activities, Japan, Singapore and Finland all recorded higher proportions of teachers participating in team-teaching than did Australia, while Alberta (Canada) and Estonia recorded proportions similar to those of Australia. Among the comparison countries selected for this report, participation in collaborative professional learning was highest in Singapore (48% of teachers participating at least once a month), followed by Australia (39%), Alberta (Canada) (29%) and Estonia (19%) while Japan and Finland both recorded less than 10%.

Among the comparison countries, Australia recorded the highest proportion of teachers participating at least once a month in the simple exchange and co-operation activities of discussions about individual students' progress (80%), exchanging materials with colleagues (78%) and working to ensure common evaluation standards (62%). However, attendance at team conferences (52%) was lower than all other comparison countries, apart from Alberta (Canada), with 33 per cent.

FIGURE 4.2 Professional collaboration and exchange and co-ordination for teaching

Percentage of lower secondary teachers who reported engaging in the following collaborative activities in their school at least once a month

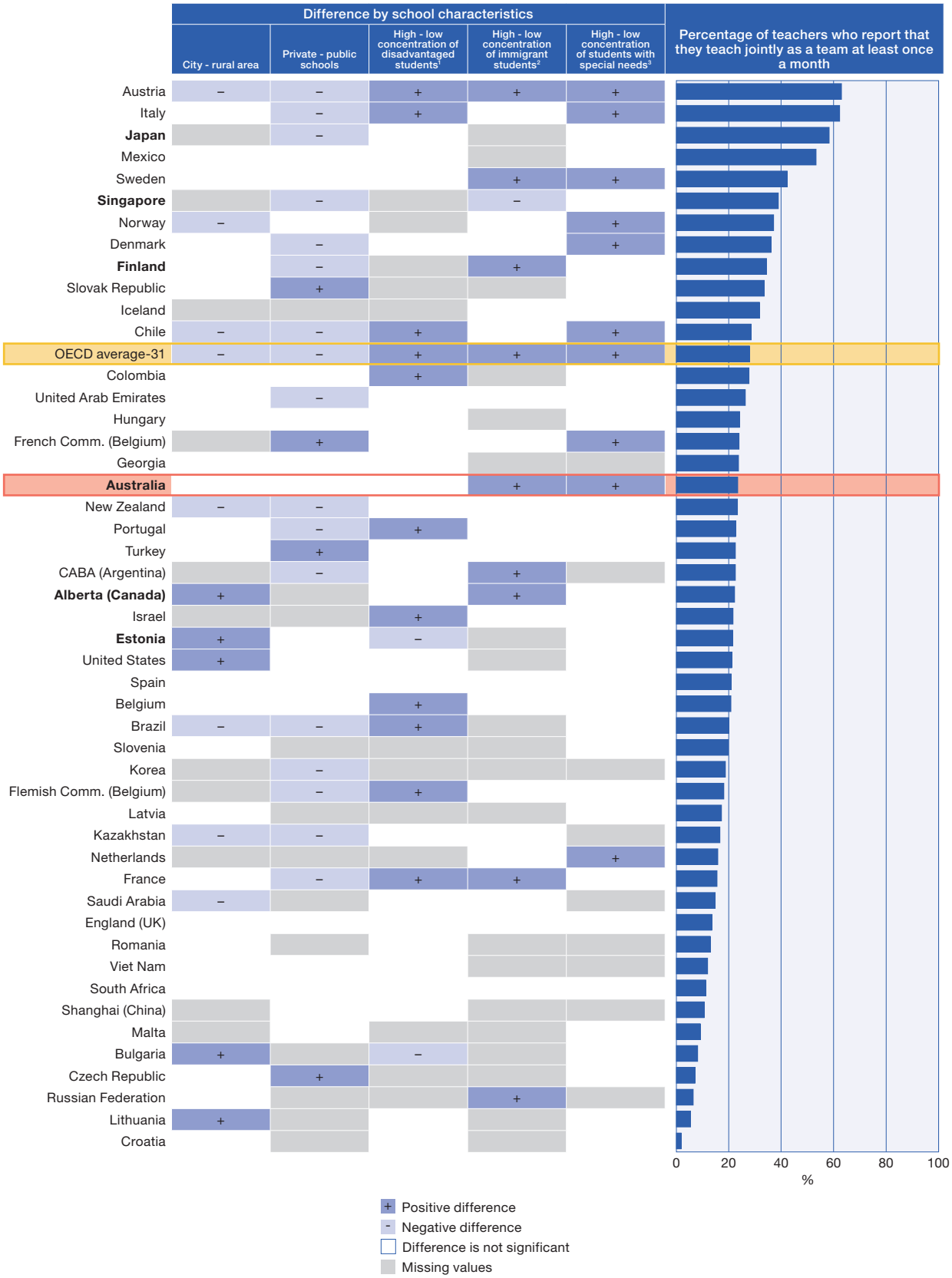


Note: High-performing PISA countries shown in bold. For explanation refer to Reader's Guide.

One of the least common collaborative activities across the OECD, on average, was joint, or team-teaching (where two or more teachers interact with a class at the same time). Around one-third of lower secondary teachers in Australia, and similarly across the OECD on average, indicated that they never participated in team teaching. When participation in team-teaching was investigated further, a number of school characteristics were found to be associated with more frequent team-teaching (Figure 4.3).

FIGURE 4.3 Teaching as a team, by school characteristics

Results based on responses of lower secondary teachers and principals



[1] High concentration of disadvantaged students refers to schools with more than 30% of students from socioeconomically disadvantaged homes.

[2] High concentration of immigrant students refers to schools with more than 10% of immigrant students.

[3] High concentration of students with special needs refers to schools with more than 10% of students with special needs.

Note: High-performing PISA countries shown in bold. For explanation refer to Reader's Guide.

Among Australian teachers, those who were working in schools with higher concentrations of students (that is, greater than 10% of students enrolled) with immigrant backgrounds reported higher participation in team-teaching, as did teachers who were working in schools with higher concentrations of students with special needs. It is not surprising that teachers who are working with a greater diversity of students make greater use of the support and adaptability that may come with teaching in a team. For Australian teachers, there were no differences in team-teaching associated with the rurality of schools, the concentration of disadvantaged students or whether schools were publicly or privately funded.

Moving to focus on teachers' reports of observing other teachers' classes and providing feedback, 11 per cent of Australian teachers reported participating in this form of collaboration with colleagues at least once a month, which was higher than the OECD average (9%) but lower than the rate reported by Japanese teachers (14%) and across TALIS countries on average (12%). Around one in five Australian teachers (21%) never participated in this form of collaboration, which was lower than both the OECD and TALIS averages, as well as the rates for teachers in Alberta (Canada), Estonia and Finland (Table 4.1).

TABLE 4.1 Observing teachers and providing feedback
Results based on responses of lower secondary teachers

	Percentage of teachers who report that they observe other teachers' classes and provide feedback with the following frequency											
	Never		Once a year or less		2 to 4 times a year		5 to 10 times a year		1 to 3 times a month		Once a week or more	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia	21	0.9	24	0.9	34	1.0	10	0.7	7	0.6	4	0.5
OECD average-31	41	0.3	23	0.2	21	0.2	6	0.1	5	0.1	4	0.1
TALIS average-48	37	0.2	22	0.2	21	0.2	7	0.1	7	0.1	5	0.1
High-performing PISA countries												
Alberta (Canada)	52	3.5	23	2.1	13	3.1	5	0.9	4	0.8	4	0.6
Estonia	34	2.1	37	1.6	19	1.3	4	0.6	4	0.5	1	0.3
Finland	69	1.1	16	0.8	7	0.7	2	0.3	3	0.3	4	0.5
Japan	7	0.8	10	0.7	48	1.4	21	1.2	10	0.7	4	0.4
Singapore	20	0.7	31	0.9	30	1.0	8	0.5	6	0.5	5	0.4

Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide

Observation of other teachers' classes at least once per month was more commonly reported by Australian teachers who were working in publicly managed compared to privately managed schools, and schools with higher proportions of students from disadvantaged homes, immigrant backgrounds, as well as special needs (Table 4.2). This pattern was also evident across the OECD on average, while Japan recorded only a difference between privately and publicly managed schools and Finland and Alberta (Canada) a difference by student immigrant background.

TABLE 4.2 Observing teachers and providing feedback, by school characteristics

Results based on responses of lower secondary teachers and principals

	Percentage of teachers who report that they observe other teachers' classes and provide feedback at least once a month																													
	Total		By school location								By school type						By concentration of students from socioeconomically disadvantaged homes[1]						By concentration of immigrant students[2]						By concentration of students with special needs[3]					
			Rural area or village (up to 3 000 people)		Town (3 001 to 100 000 people)		City (over 100 000 people)		City - Rural area		Publicly managed schools[4]		Privately managed schools[5]		Private - Public		Less than or equal to 30% (a)		More than 30% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	11	0.6	6	2.6	10	1.3	11	0.8	5	2.8	12	0.8	9	1.1	**-3**	1.5	9	0.9	14	1.3	**5**	1.7	9	1.0	12	0.9	**3**	1.4	9	0.9	12	1.0	**3**	1.4
OECD average-31	9	0.2	9	0.8	9	0.2	9	0.3	0	0.8	9	0.2	8	0.5	**-1**	0.5	8	0.2	11	0.4	**2**	0.5	9	0.2	11	0.4	**1**	0.5	8	0.2	10	0.3	**1**	0.4
TALIS average-48	12	0.1	13	0.5	13	0.2	13	0.2	0	0.6	13	0.1	11	0.5	**-4**	0.5	12	0.2	16	0.5	**2**	0.5	12	0.2	13	0.5	**1**	0.5	12	0.1	9	0.3	**1**	0.3
High-performing PISA countries																																		
Alberta (Canada)	8	1.0	3	1.4	6	1.7	10	1.6	**7**	2.1	8	1.0	c	c	c	c	8	1.1	11	3.9	3	4.3	5	1.6	11	1.2	**6**	2.0	7	1.5	9	1.1	2	1.8
Estonia	5	0.7	3	0.6	5	0.8	11	1.7	**8**	1.8	5	0.6	13	5.9	8	5.9	5	0.7	3	1.3	-2	1.4	5	0.7	c	c	c	c	5	0.8	5	1.1	0	1.2
Finland	7	0.7	7	2.2	6	0.9	7	0.8	0	2.4	7	0.7	7	2.1	1	2.2	7	0.7	c	c	c	c	6	0.8	9	1.1	**3**	1.3	7	0.9	7	0.9	0	1.2
Japan	14	0.9	c	c	17	1.8	12	1.1	c	c	15	0.9	7	2.1	**-8**	2.3	14	1.0	15	3.4	2	3.6	14	0.9	c	c	c	c	14	0.9	17	3.5	4	3.5
Singapore	11	0.6	a	a	a	a	11	0.6	a	a	11	0.5	12	3.4	1	3.4	11	0.7	c	c	c	c	11	0.8	11	1.0	0	1.4	11	0.7	12	2.3	1	2.5

[1] "Socioeconomically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care.

[2] "Immigrant students" refers to "students who are immigrants or with a migrant background", as reported by the school principal. An "immigrant student" is one who was born outside the country. A "student with a migrant background" has parents who were both born outside the country.

[3] Students with special needs are those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged.

[4] A publicly managed school is a school whose principal reported that it is managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise. In the Principal Questionnaire, this question does not make any reference to the source of the school's funding which is reported in the preceding question.

[5] A privately managed school is a school whose principal reported that it is managed by a non-governmental organisation (e.g. a church, trade union, business or other private institution). In the Principal Questionnaire, this question does not make any reference to the source of the school's funding, which is reported in the preceding question. In some countries, the privately managed schools category includes schools that receive significant funding from the government (government-dependent private schools).

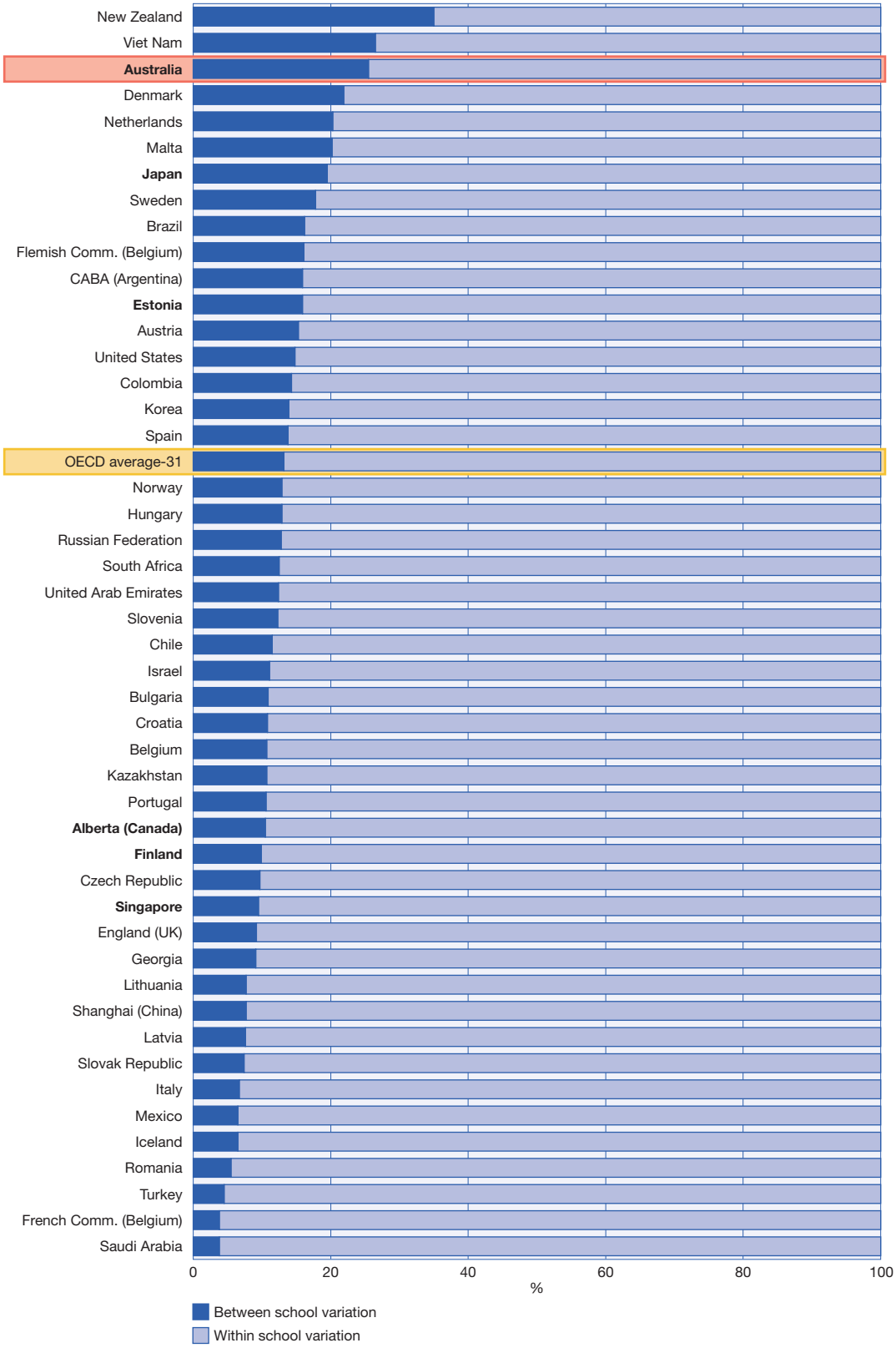
Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide

As indicated in the previous discussion, participation in various collaborative activities varies greatly across the TALIS countries, as well as across different types of schools. Analysis of the TALIS 2013 data indicated that some of the variance in teacher collaboration is explained at the country level, although the majority of variance is still accounted for at school and teacher levels. From a policy perspective, knowing how much of the variance (or difference) in teacher collaboration is attributed to differences between schools and how much is attributed to differences within schools or to teachers, can inform how and where policies should be focused.

The results presented in Figure 4.4 show that, among the TALIS 2018 countries, Australia has one of the higher proportions of school-level variance in the index of professional collaboration, at just over 25 per cent. Teacher collaboration is more prevalent in some Australian schools than others, suggesting that school-level priorities, values or policies may be shaping the extent to which Australian teachers participate in collaborative activities with their peers.

FIGURE 4.4 Variation in professional collaboration

Distribution of variance in lower secondary teachers' professional collaboration between and within schools

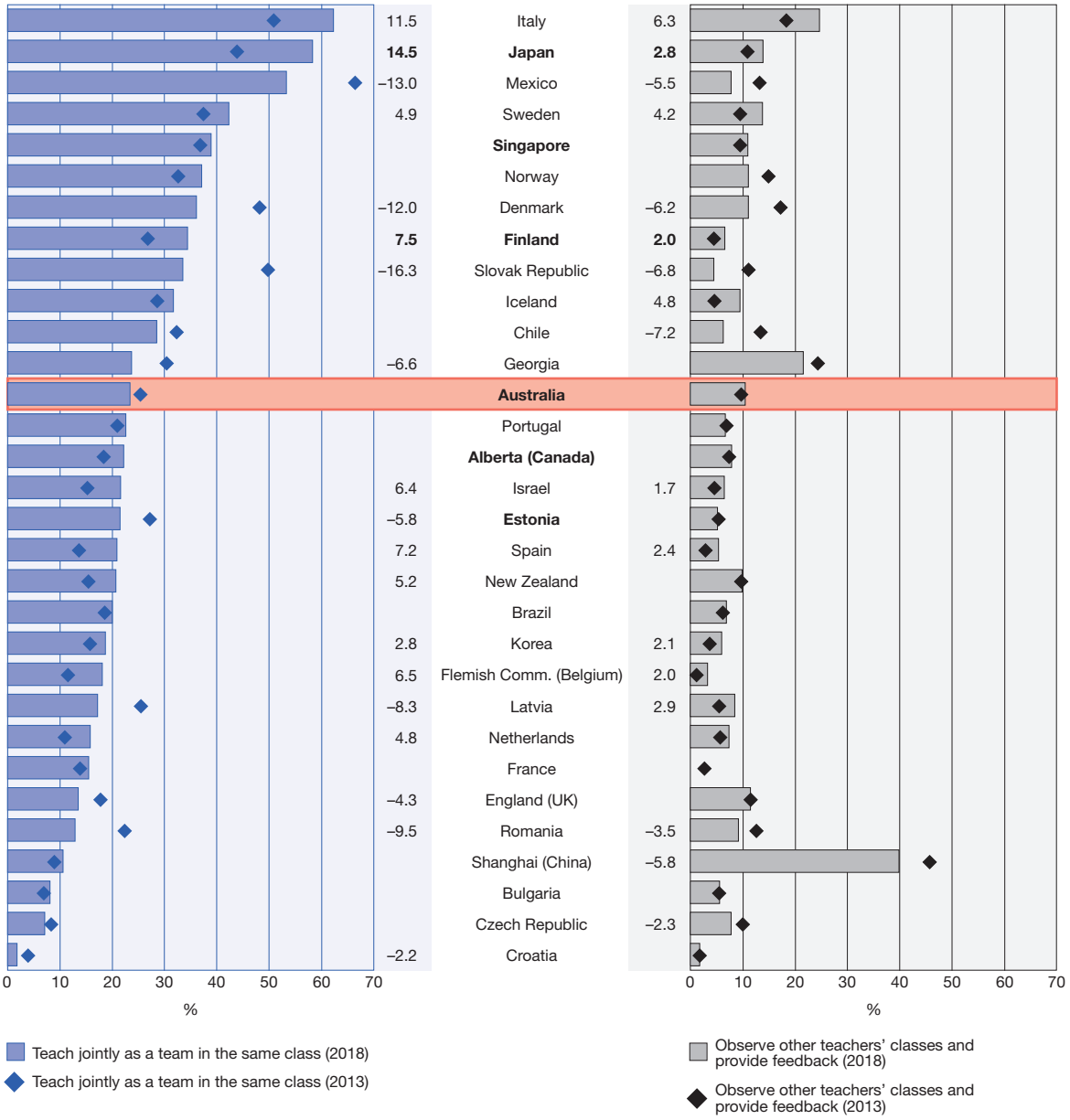


Notes: The index of professional collaboration measures teachers' engagement in deeper forms of collaboration that involve more interdependence between teachers, including teaching jointly as a team in the same class, providing feedback based on classroom observations, engaging in joint activities across different classes and age groups and participating in collaborative professional learning. High-performing PISA countries shown in bold. For explanation refer to Reader's Guide.

Changes in two collaborative activities – team teaching and observing other teachers' classes and providing feedback – between TALIS 2013 and 2018 are presented in Figure 4.5. Among Australian teachers, there has been no significant change in the proportion of teachers who reported teaching as a member of a team (with two or more teachers teaching a class at the same time) or observing other teachers' work and providing them with feedback between these two TALIS cycles. Results for Alberta (Canada) were similar to those for Australia, whereas in Japan and Finland there has been significant growth in both forms of teacher collaboration over the past five years.

FIGURE 4.5 Change in teacher collaboration from 2013 to 2018

Percentage of lower secondary teachers who reported engaging in the following collaborative activities in their school at least once a month



Notes: Only countries and economies with available data for 2013 and 2018 are shown. Statistically significant changes between 2013 and 2018 (TALIS 2018 - TALIS 2013) are reported next to the category and the country/economy name. High-performing PISA countries shown in bold. For explanation refer to Reader's Guide.

The importance of teacher collaboration was explored through its relationship with three key measures – teachers' own satisfaction with their jobs, their levels of self-efficacy and teachers' reported use of cognitive activation practices in their classrooms. These types of activities encourage students to evaluate, integrate and apply knowledge within the context of problem-solving – an important intersection of 21st century skills.

In Australia, and most other TALIS countries, teachers who reported engaging in professional collaboration with their colleagues more often also reported higher levels of job satisfaction (after controlling for factors such as teachers' age, gender, years of experience and employment status) (Table 4.3).

TABLE 4.3 Relationship between job satisfaction, professional collaboration and teacher characteristics
Results of linear regression based on responses of lower secondary teachers

	Index of job satisfaction[1]										
	Dependent on:										
	Index of professional collaboration[2]		Female[3]		Age[4]		Years of experience as a teacher at current school[4]		Working full-time[5]		
	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	R-squared
Australia	**0.26**	0.02	0.05	0.11	-0.01	0.01	**0.02**	0.01	0.01	0.12	0.06
OECD average-31	**0.16**	0.00	**0.13**	0.02	0.00	0.00	**0.00**	0.00	**-0.07**	0.03	0.04
TALIS average-48	**0.16**	0.00	**0.10**	0.02	**0.00**	0.00	**0.00**	0.00	**-0.04**	0.02	0.04
High-performing PISA countries											
Alberta (Canada)	**0.19**	0.04	0.09	0.20	**0.02**	0.01	0.00	0.02	**-0.58**	0.20	0.06
Estonia	**0.16**	0.02	0.07	0.11	0.00	0.00	0.00	0.00	-0.14	0.08	0.03
Finland	**0.17**	0.03	0.10	0.09	-0.01	0.01	0.00	0.01	0.24	0.19	0.02
Japan	**0.16**	0.02	**-0.16**	0.07	0.00	0.00	**0.03**	0.01	**-0.63**	0.09	0.04
Singapore	**0.21**	0.02	-0.04	0.09	**0.02**	0.01	0.01	0.01	-0.20	0.20	0.05

[1] The index of job satisfaction measures teachers' satisfaction with their current work environment and satisfaction with the profession.

[2] The index of professional collaboration measures teachers' engagement in deeper forms of collaboration that involve more interdependence between teachers, including teaching jointly as a team in the same class, providing feedback based on classroom observations, engaging in joint activities across different classes and age groups and participating in collaborative professional learning.

[3] Dummy variable: the reference category is male.

[4] Number of years.

[5] Dummy variable: the reference category is working part-time.

Note: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide

Similarly, those teachers with more frequent participation in professional collaboration also reported higher levels of self-efficacy (Table 4.4).

TABLE 4.4 Relationship between teacher self-efficacy, professional collaboration and teacher characteristics
Results of linear regression based on responses of lower secondary teachers

	Index of self-efficacy[1]										
	Dependent on:										
	Index of professional collaboration[2]		Female[3]		Age[4]		Years of experience as a teacher at current school[4]		Working full-time[5]		R-squared
	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	
Australia	**0.21**	0.02	**0.59**	0.09	**0.02**	0.00	0.01	0.01	**0.46**	0.10	0.09
OECD average-31	**0.20**	0.00	**0.24**	0.02	**0.01**	0.00	**0.01**	0.00	**0.29**	0.03	0.07
TALIS average-48	**0.21**	0.00	**0.26**	0.02	**0.01**	0.00	**0.01**	0.00	**0.28**	0.03	0.07
High-performing PISA countries											
Alberta (Canada)	**0.17**	0.04	**0.37**	0.15	**0.04**	0.01	-0.01	0.01	0.45	0.28	0.08
Estonia	**0.21**	0.02	**0.39**	0.09	0.00	0.00	0.00	0.00	0.13	0.08	0.05
Finland	**0.24**	0.03	**0.47**	0.11	0.00	0.01	0.00	0.01	0.37	0.19	0.05
Japan	**0.16**	0.02	**-0.41**	0.07	**0.03**	0.00	0.01	0.01	**0.35**	0.12	0.07
Singapore	**0.21**	0.02	**0.31**	0.09	**0.03**	0.01	0.01	0.01	0.20	0.22	0.05

[1] The index of self-efficacy measures teacher self-efficacy in classroom management, instruction and student engagement.

[2] The index of professional collaboration measures teachers' engagement in deeper forms of collaboration that involve more interdependence between teachers, including teaching jointly as a team in the same class, providing feedback based on classroom observations, engaging in joint activities across different classes and age groups and participating in collaborative professional learning.

[3] Dummy variable: the reference category is male.

[4] Number of years.

[5] Dummy variable: the reference category is working part-time.

Note: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide

The relationship between participation in professional collaboration and use of cognitive activation practices was also positive – teachers who participated more frequently in professional collaboration also reported greater use of cognitive activation activities in their classes (Table 4.5).

TABLE 4.5 Relationship between the use of cognitive activation practices, professional collaboration and teacher characteristics

Results of linear regression based on responses of lower secondary teachers

	Index of cognitive activation practices[1, 2]										
	Dependent on:										
	Index of professional collaboration[3]		Female[4]		Age[5]		Years of experience as a teacher at current school[5]		Working full-time[6]		
	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	R-squared
Australia	**0.16**	0.02	0.09	0.10	0.00	0.00	-0.01	0.01	0.08	0.14	0.03
OECD average-31	**0.20**	0.00	0.01	0.02	0.00	0.00	**0.00**	0.00	**0.11**	0.03	0.05
TALIS average-48	**0.22**	0.00	**0.10**	0.02	**0.00**	0.00	**0.00**	0.00	**0.11**	0.02	0.05
High-performing PISA countries											
Alberta (Canada)	**0.19**	0.04	-0.13	0.17	0.01	0.01	**-0.03**	0.02	0.48	0.46	0.05
Estonia	**0.22**	0.03	0.12	0.09	0.00	0.00	0.00	0.00	0.03	0.07	0.06
Finland	**0.22**	0.03	-0.04	0.10	-0.01	0.01	-0.01	0.01	**-0.32**	0.16	0.04
Japan	**0.14**	0.02	**-0.36**	0.06	**-0.02**	0.00	0.00	0.01	0.21	0.11	0.04
Singapore	**0.18**	0.03	**0.31**	0.11	0.01	0.01	0.00	0.01	0.33	0.21	0.02

[1] The analysis is restricted to teachers reporting that their teaching in the target class is not directed entirely or mainly to special needs students.

[2] The index of cognitive activation practices measures the frequency with which a teacher uses cognitive activation practices in the classroom. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

[3] The index of professional collaboration measures teachers' engagement in deeper forms of collaboration that involve more interdependence between teachers, including teaching jointly as a team in the same class, providing feedback based on classroom observations, engaging in joint activities across different classes and age groups and participating in collaborative professional learning.

[4] Dummy variable: the reference category is male.

[5] Number of years.

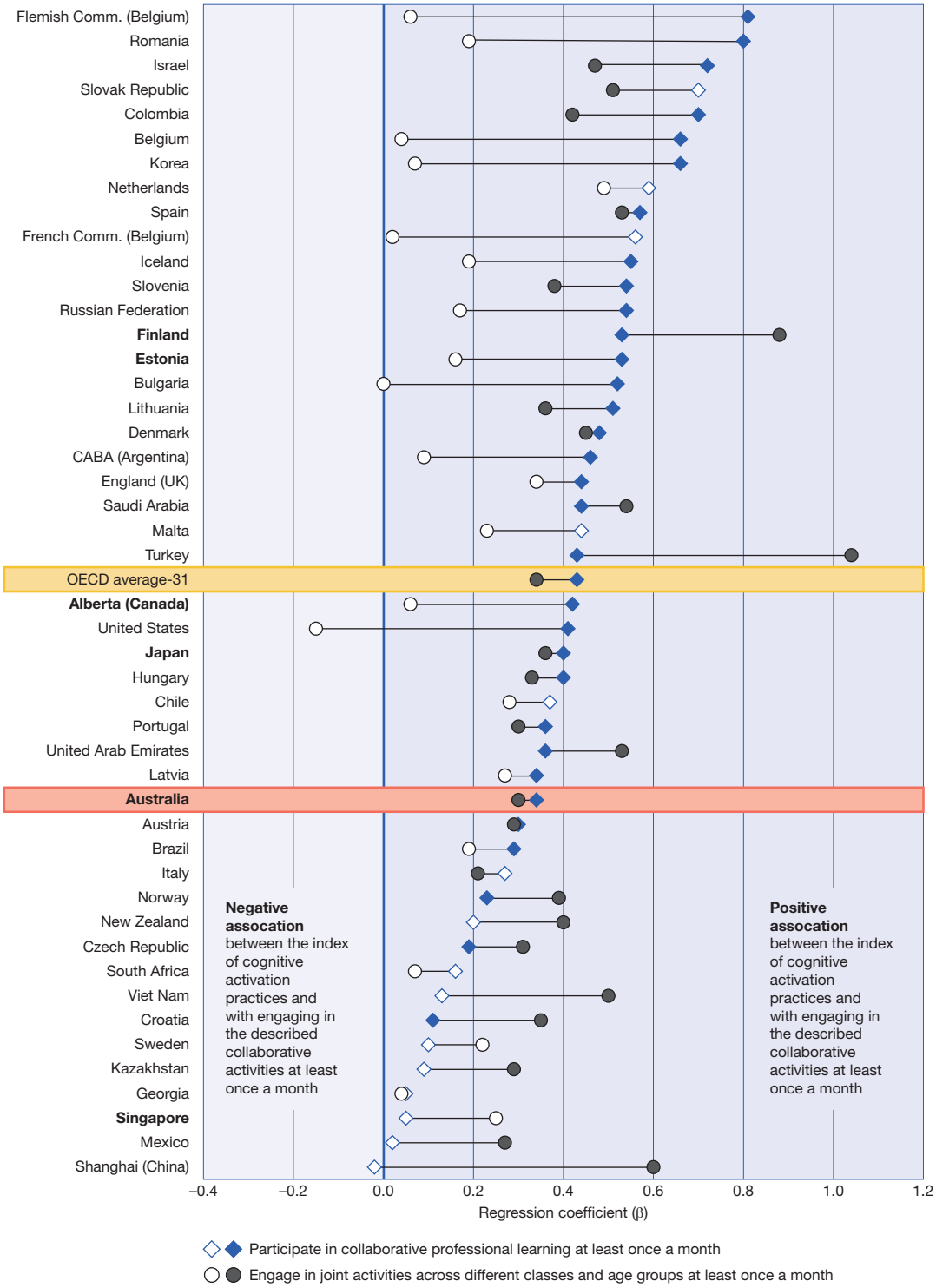
[6] Dummy variable: the reference category is working part-time.

Notes: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

The relationship between professional collaboration and use of cognitive activation strategies was examined further to explore whether certain collaborative activities were more strongly related with teachers' use of cognitive activation practices than others. Regression results indicated that in Australia, teachers who reported participating in collaborative professional learning at least once a month also tended to use cognitive activation strategies in their classrooms more often (Figure 4.6). This relationship was also apparent in the other comparison countries, apart from Singapore. At the same time, Australian teachers who reported participating in joint activities across different classes and age groups at least once a month, also reported higher use of cognitive activation practices in their classrooms. This relationship was also found across OECD countries on average, and in the comparison countries Finland and Japan.

FIGURE 4.6 Relationship between the use of cognitive activation practices and different collaborative activities

Change in the index of cognitive activation practices[1] associated with engaging in the following collaborative activities at least once a month[2]



[1] The index of cognitive activation practices measures the frequency with which a teacher uses cognitive activation practices in her/his classroom. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

[2] Results of linear regression based on responses of lower secondary teachers. The sample is restricted to teachers reporting that their teaching in the target class is not directed entirely or mainly to special needs students. The predictors are dummy variables: the reference category refers to teachers engaging in the respective collaborative activity less than once a month or never. Controlling for the following teacher characteristics: gender, age, years of experience as a teacher at current school, working full-time; and for collegiality as measured by collaborative school culture characterised by mutual support and teachers' mutual reliance.

Notes: Statistically significant coefficients are marked in a darker tone. High-performing PISA countries shown in bold. For explanation refer to Reader's Guide.

4.2.2 Teachers' collegial relationships

The quality of working relationships is clearly an important consideration when investing in collaboration, as collaboration depends on mutual support and open exchange of ideas. Working together through collaborative activities may also contribute to improved relationships between colleagues. Any relationship between collegiality and collaboration, then, is likely to work in both directions.

TALIS asked teachers and school leaders to indicate their levels of agreement (*strongly disagree*, *disagree*, *agree* or *strongly agree*) to the following statements about collegiality at their schools:

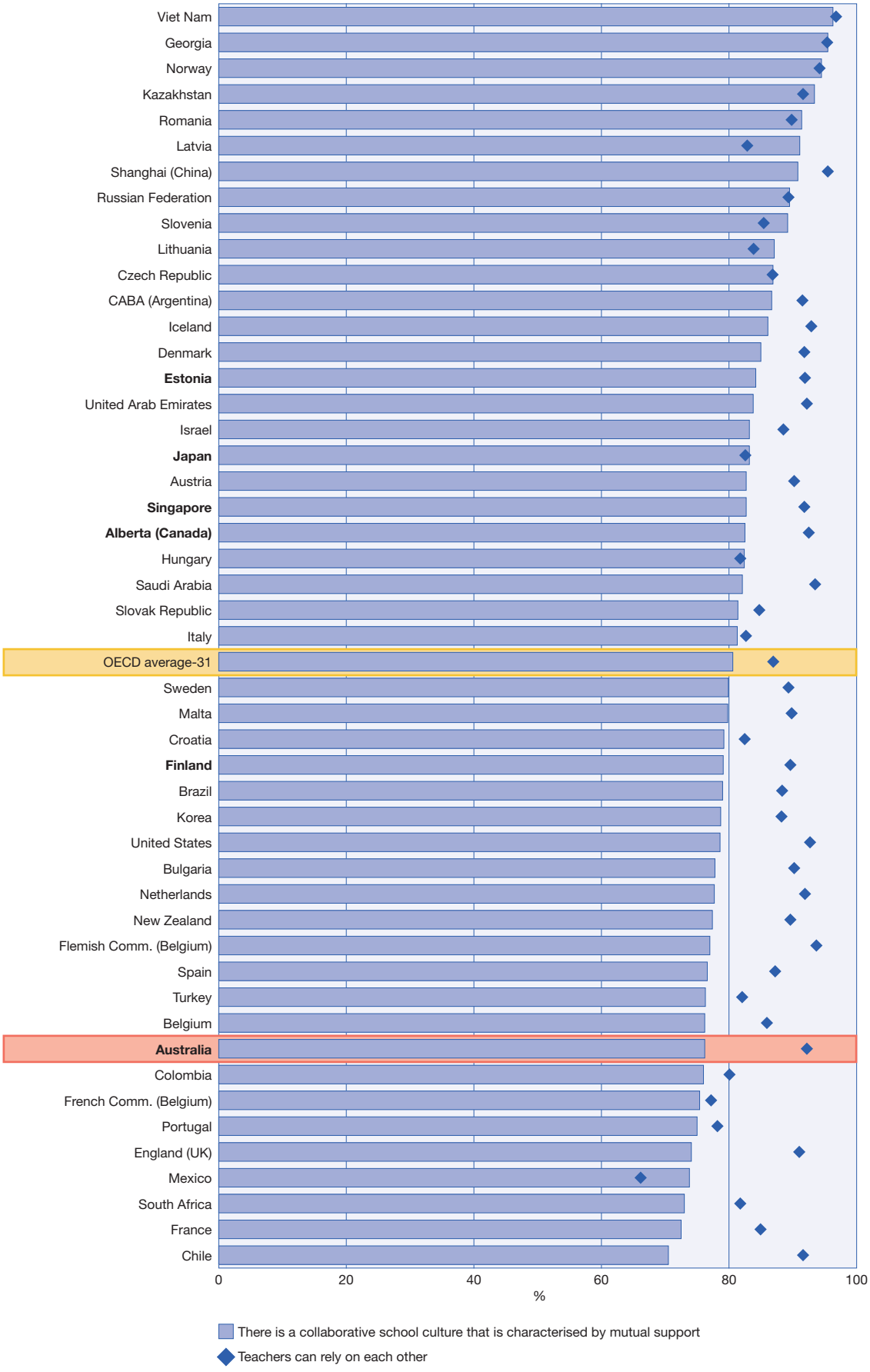
- The school has a culture of shared responsibility for school issues
- There is a collaborative school culture characterised by mutual support
- The school staff share a common set of beliefs about teaching and learning
- The school encourages staff to lead new initiatives
- Teachers can rely on each other.

In Australia, 93 per cent of lower secondary teachers agreed or strongly agreed that teachers can rely on each other at their school, while 76 per cent agreed that there was a collaborative culture characterised by mutual support at their school. The average proportions of teachers who agreed with these statements across OECD countries were 87 per cent and 81 per cent, respectively (Figure 4.7).

Compared to Australia, reports of a collaborative culture were higher in the comparison countries Japan, Singapore, Estonia and Alberta (Canada), while there was no difference in the proportion of Finnish and Australian teachers who agreed with this statement.

FIGURE 4.7 Teacher views on collaborative school climate

Percentage of lower secondary teachers who "agree" or "strongly agree" with the following statements



Note: High-performing PISA countries shown in bold. For explanation refer to Reader's Guide.

BOX 4.2 Comparing Australian primary and lower secondary teachers' views of collaborative school environments

According to the TALIS 2018 results, Australian primary teachers may experience greater collegiality in their schools than their counterparts in secondary schools. Agreement with items about collegiality, including the school having a culture of shared responsibility and a collaborative school culture characterised by mutual support was higher among primary teachers (82% and 85%, respectively) than among lower secondary teachers (70% and 76%, respectively). However, there was no significant difference in the proportions of primary and lower secondary teachers who agreed that teachers in their schools could rely on each other (Table A4.2). According to the responses of Australian teachers, opportunities for staff, parents or guardians and students to participate in school decisions are more common in primary schools than secondary schools – with higher proportions of primary teachers compared to lower secondary teachers agreeing or strongly agreeing with these items.

Among Australian teachers, agreement that the school culture was collaborative and characterised by mutual support was higher among teachers located in metropolitan areas compared to those in rural areas (78% compared to 67%) and among those working in privately managed schools compared to publicly managed (government) schools (78% compared to 74%) (Table 4.6).

TABLE 4.6 Collaborative school culture, by school characteristics

Results based on responses of lower secondary teachers and principals

	Percentage of teachers who "agree" or "strongly agree" that there is a collaborative school culture which is characterised by mutual support																													
	Total		By school location								By school type						By concentration of students from socioeconomically disadvantaged homes[1]						By concentration of immigrant students[2]						By concentration of students with special needs[3]					
			Rural area or village (up to 3 000 people)		Town (3 001 to 100 000 people)		City (over 100 000 people)		City - Rural area		Publicly managed schools[4]		Privately managed schools[5]		Private - Public		Less than or equal to 30% (a)		More than 30% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	76	0.9	67	4.6	72	2.1	78	1.0	**11**	4.7	74	1.0	78	1.6	**5**	1.9	78	1.1	71	1.6	**-7**	2.0	75	1.4	78	1.2	3	1.8	77	1.1	75	1.7	-2	1.9
OECD average-31	81	0.2	83	0.7	80	0.3	81	0.4	**-2**	0.8	80	0.3	83	0.6	**4**	0.7	81	0.3	78	0.7	**-2**	0.8	81	0.3	79	0.7	-1	0.8	81	0.3	81	0.4	0	0.5
TALIS average-48	82	0.2	84	0.5	82	0.3	82	0.3	**-2**	0.6	82	0.2	84	0.4	**3**	0.5	82	0.2	81	0.5	-1	0.6	82	0.2	80	0.6	-1	0.7	82	0.2	80	0.5	0	0.5
High-performing PISA countries																																		
Alberta (Canada)	83	2.2	92	3.1	84	3.4	79	3.5	**-13**	4.8	81	2.4	c	c	c	c	82	2.4	84	3.4	1	4.3	84	3.2	80	3.5	-4	5.1	82	3.5	84	3.1	2	5.0
Estonia	84	1.0	84	1.5	84	1.7	86	2.0	3	2.5	84	1.1	97	1.5	**13**	1.8	84	1.0	83	7.0	-1	7.0	84	1.0	c	c	c	c	85	1.2	83	1.9	-2	2.3
Finland	79	1.4	75	4.0	78	1.9	83	2.2	8	4.6	79	1.4	78	5.4	-1	5.6	79	1.4	c	c	c	c	78	1.5	85	2.8	**7**	3.1	79	1.8	78	2.7	-1	3.5
Japan	83	0.9	c	c	85	1.8	82	1.1	c	c	84	1.0	75	2.9	**-9**	3.1	84	0.9	75	4.5	-8	4.6	83	0.9	c	c	c	c	83	1.0	85	3.1	2	3.4
Singapore	83	0.7	a	a	a	a	83	0.7	a	a	82	0.7	84	2.8	2	2.9	83	0.7	c	c	c	c	82	0.8	84	1.2	3	1.5	82	0.7	87	1.9	**6**	2.0

[1] "Socioeconomically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care.

[2] "Immigrant students" refers to "students who are immigrants or with a migrant background", as reported by the school principal. An "immigrant student" is one who was born outside the country. A "student with a migrant background" has parents who were both born outside the country.

[3] Students with special needs are those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged.

[4] A publicly managed school is a school whose principal reported that it is managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise. In the Principal Questionnaire, this question does not make any reference to the source of the school's funding which is reported in the preceding question.

[5] A privately managed school is a school whose principal reported that it is managed by a non-governmental organisation (e.g. a church, trade union, business or other private institution). In the Principal Questionnaire, this question does not make any reference to the source of the school's funding, which is reported in the preceding question. In some countries, the privately managed schools category includes schools that receive significant funding from the government (government-dependent private schools).

Notes: Statistically significant differences are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

4.2.3 Changes in collaborative school climate

A comparison of responses to TALIS 2013 and 2018 indicated that there has been a change in Australian teachers' responses to the two collegiality items, with agreement increasing significantly to statements regarding the school having a culture of shared responsibility (from 66% to 70%) and a collaborative culture characterised by mutual support (from 70% to 76%). Estonia was the only high-performing PISA country where there was a similarly significant increase in the proportion of teachers agreeing that there is a collaborative school culture characterised by mutual support (Table 4.7).

TABLE 4.7 Change in views on collaborative school climate from 2013 to 2018
Results based on responses of lower secondary teachers

	Percentage of teachers who "agree" or "strongly agree" with the following statements											
	This school has a culture of shared responsibility for school issues						There is a collaborative school culture that is characterised by mutual support					
	TALIS 2013		TALIS 2018		Change between 2013 and 2018 (TALIS 2018 - TALIS 2013)		TALIS 2013		TALIS 2018		Change between 2013 and 2018 (TALIS 2018 - TALIS 2013)	
	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	66	1.9	70	0.8	**5**	2.0	70	1.7	76	0.9	**6**	1.9
High-performing PISA countries												
Alberta (Canada)	78	1.8	80	2.1	2	2.8	81	1.5	83	2.2	1	2.7
Estonia	77	1.1	77	1.1	0	1.6	81	1.1	84	1.0	**4**	1.5
Finland	80	1.3	80	1.4	0	1.9	81	1.5	79	1.4	-2	2.0
Japan	67	1.2	70	1.1	3	1.6	82	1.1	83	0.9	2	1.4
Singapore	78	0.7	77	0.7	-1	1.1	81	0.7	83	0.7	1	1.0

Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide

The relationship between participation in collaborative activities and a collaborative school climate was explored through regression analyses. Results indicated that among Australian teachers, and those in all other TALIS countries, those who agreed that there was a collaborative school culture characterised by mutual support also tended to engage in professional collaboration activities more frequently. In around two-thirds of TALIS 2018 countries, including Australia, there was also a positive association with teachers' reliance on each other and their engagement in professional collaboration. This positive relationship held after controlling for teacher characteristics (age, gender, years of experience at current school and employment status) as well as reports of a collaborative school culture characterised by mutual support (Table 4.8).

TABLE 4.8 Relationship between professional collaboration, collegiality and teacher characteristics
Results of linear regression based on responses of lower secondary teachers

	Index of professional collaboration[1]												
	Dependent on:												
	Collaborative school culture characterised by mutual support[2]		Teachers can rely on each other[3]		Female[4]		Age[5]		Years of experience as a teacher at current school[5]		Working full-time[6]		
	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	R^2
Australia	**1.01**	0.09	**0.51**	0.13	-0.03	0.11	**-0.01**	0.00	**0.03**	0.01	**0.26**	0.10	0.07
OECD average-31	**0.72**	0.02	**0.29**	0.03	**-0.06**	0.02	**-0.01**	0.00	**0.00**	0.00	**0.26**	0.03	0.04
TALIS average-48	**0.75**	0.02	**0.36**	0.02	**-0.09**	0.02	**-0.01**	0.00	**0.01**	0.00	**0.18**	0.03	0.04
High-performing PISA countries													
Alberta (Canada)	**0.78**	0.21	0.25	0.23	-0.15	0.15	0.01	0.01	**-0.04**	0.02	0.19	0.24	0.04
Estonia	**0.80**	0.10	**0.30**	0.14	0.02	0.10	-0.01	0.00	**0.01**	0.00	**0.23**	0.08	0.04
Finland	**0.36**	0.12	0.27	0.14	**-0.35**	0.08	0.01	0.00	0.00	0.01	0.22	0.16	0.02
Japan	**0.78**	0.10	**0.60**	0.11	-0.03	0.07	**0.01**	0.00	**-0.04**	0.01	0.14	0.13	0.07
Singapore	**0.74**	0.09	**0.57**	0.12	**-0.34**	0.08	**-0.01**	0.00	**0.02**	0.01	**0.47**	0.17	0.05

[1] The index of professional collaboration measures teachers' engagement in deeper forms of collaboration that involve more interdependence between teachers, including teaching jointly as a team in the same class, providing feedback based on classroom observations, engaging in joint activities across different classes and age groups and participating in collaborative professional learning.

[2] Dummy variable: the reference category is to "strongly disagree" or "disagree" with the statement that there is a collaborative school culture which is characterised by mutual support.

[3] Dummy variable: the reference category is to "strongly disagree" or "disagree" with the statement that teachers can rely on each other.

[4] Dummy variable: the reference category is male.

[5] Number of years.

[6] Dummy variable: the reference category is working part-time.

Notes: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

The relationship between collegiality and collaboration that was suggested in the introduction to this section was examined further using regression analyses. Building on the earlier analyses that found a significant relationship between regular professional collaboration and higher levels of job satisfaction and self-efficacy among teachers, two indicators of teacher collegiality (teachers can rely on each other, collaborative culture characterised by mutual support) were added to the models. Results indicated that for Australian teachers, and for those in most other TALIS countries, the positive association between regular participation in professional collaboration and higher levels of job satisfaction (Table 4.9) and self-efficacy (Table 4.10) still held, although adding the measures of collegiality to the model decreased the strength of the relationships. At least part of the positive relationships between professional collaboration and teachers' satisfaction and self-efficacy are attributable to the teachers' positive relationships with their colleagues.

TABLE 4.9 Relationship between job satisfaction, professional collaboration, teacher characteristics and collegiality

Results of linear regression based on responses of lower secondary teachers

	Index of job satisfaction[1]														
	Dependent on:														
	Index of professional collaboration[2]		Female[3]		Age[4]		Years of experience as a teacher at current school[4]		Working full-time[5]		Collaborative school culture characterised by mutual support[6]		Teachers can rely on each other[7]		
	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	R^2
Australia	**0.17**	0.02	0.15	0.10	0.00	0.01	0.01	0.01	0.08	0.11	**1.40**	0.11	**1.48**	0.22	0.18
OECD average-31	**0.11**	0.00	**0.16**	0.02	**0.00**	0.00	**0.00**	0.00	-0.02	0.02	**1.20**	0.02	**0.99**	0.03	0.14
TALIS average-48	**0.11**	0.00	**0.12**	0.02	0.00	0.00	**0.00**	0.00	-0.01	0.02	**1.19**	0.02	**0.96**	0.03	0.13
High-performing PISA countries															
Alberta (Canada)	**0.14**	0.03	0.21	0.20	0.02	0.01	-0.01	0.02	**-0.44**	0.17	**1.54**	0.20	**1.18**	0.32	0.18
Estonia	**0.12**	0.02	0.13	0.11	-0.01	0.00	0.00	0.00	-0.12	0.07	**0.98**	0.11	**0.45**	0.16	0.08
Finland	**0.13**	0.02	0.15	0.09	-0.01	0.00	-0.01	0.01	0.25	0.18	**1.38**	0.10	**0.85**	0.17	0.13
Japan	**0.09**	0.02	**-0.17**	0.06	**-0.01**	0.00	**0.03**	0.01	**-0.54**	0.09	**0.80**	0.12	**0.86**	0.12	0.11
Singapore	**0.13**	0.02	-0.03	0.09	**0.01**	0.00	0.00	0.01	-0.04	0.19	**1.38**	0.11	**1.36**	0.15	0.18

[1] The index of job satisfaction measures teachers' satisfaction with their current work environment and satisfaction with the profession.

[2] The index of professional collaboration measures teachers' engagement in deeper forms of collaboration that involve more interdependence between teachers, including teaching jointly as a team in the same class, providing feedback based on classroom observations, engaging in joint activities across different classes and age groups and participating in collaborative professional learning.

[3] Dummy variable: the reference category is male.

[4] Number of years.

[5] Dummy variable: the reference category is working part-time.

[6] Dummy variable: the reference category is to "strongly disagree" or "disagree" with the statement that there is a collaborative school culture which is characterised by mutual support.

[7] Dummy variable: the reference category is to "strongly disagree" or "disagree" with the statement that teachers can rely on each other.

Notes: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

TABLE 4.10 Relationship between teacher self-efficacy, professional collaboration and teacher characteristics

Results of linear regression based on responses of lower secondary teachers

	Index of self-efficacy[1]										
	Dependent on:										
	Index of professional collaboration[2]		Female[3]		Age[4]		Years of experience as a teacher at current school[4]		Working full-time[5]		
	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	R^2
Australia	**0.21**	0.02	**0.59**	0.09	**0.02**	0.00	0.01	0.01	**0.46**	0.10	0.09
OECD average-31	**0.20**	0.00	**0.24**	0.02	**0.01**	0.00	**0.01**	0.00	**0.29**	0.03	0.07
TALIS average-48	**0.21**	0.00	**0.26**	0.02	**0.01**	0.00	**0.01**	0.00	**0.28**	0.03	0.07
High-performing PISA countries											
Alberta (Canada)	**0.17**	0.04	**0.37**	0.15	**0.04**	0.01	-0.01	0.01	0.45	0.28	0.08
Estonia	**0.21**	0.02	**0.39**	0.09	0.00	0.00	0.00	0.00	0.13	0.08	0.05
Finland	**0.24**	0.03	**0.47**	0.11	0.00	0.01	0.00	0.01	0.37	0.19	0.05
Japan	**0.16**	0.02	**-0.41**	0.07	**0.03**	0.00	0.01	0.01	**0.35**	0.12	0.07
Singapore	**0.21**	0.02	**0.31**	0.09	**0.03**	0.01	0.01	0.01	0.20	0.22	0.05

[1] The index of self-efficacy measures teacher self-efficacy in classroom management, instruction and student engagement.

[2] The index of professional collaboration measures teachers' engagement in deeper forms of collaboration that involve more interdependence between teachers, including teaching jointly as a team in the same class, providing feedback based on classroom observations, engaging in joint activities across different classes and age groups and participating in collaborative professional learning.

[3] Dummy variable: the reference category is male.

[4] Number of years.

[5] Dummy variable: the reference category is working part-time.

Notes: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

4.3 The role of school leaders in fostering collaboration

School leadership can have an important role in shaping the collaboration environment of a school. Besides providing a role model for collaboration, and encouraging collaboration among staff at all levels, distributed decision-making, in which opportunities are provided for many stakeholders to participate in school decisions, have been shown in previous TALIS research to relate to increased teacher collaboration (OECD, 2013).

Information on the prevalence of distributed school decision-making was collected by asking teachers and principals how much they agreed (*strongly disagree*, *disagree*, *agree*, *strongly agree*) that their school provides staff, students and parents with opportunities to actively participate in school decisions. Results for Australia along with the OECD and TALIS averages and the high-performing PISA countries are provided in Table 4.11.

In Australia, 67 per cent of teachers agreed or strongly agreed that staff were provided with opportunities to participate in school decisions, which was lower than the OECD average of 77 per cent and the relevant proportions in the high-performing PISA countries. According to Australian teachers, opportunities for parents or guardians to participate in school decisions were more common than opportunities for students to participate – 71 per cent of Australian teachers agreed that parents had opportunities to participate at their school, while 64 per cent of teachers agreed that students had these opportunities. These proportions were again lower than the corresponding OECD averages (77% and 71%, respectively).

TABLE 4.11 Opportunities to participate in decisions
Results based on responses of lower secondary teachers

	Percentage of teachers who "agree" or "strongly agree" with the following statements					
	This school provides staff with opportunities to actively participate in school decisions		This school provides parents or guardians with opportunities to actively participate in school decisions		This school provides students with opportunities to actively participate in school decisions	
	%	S.E.	%	S.E.	%	S.E.
Australia	67	0.9	71	0.9	64	1.0
OECD average-31	77	0.2	77	0.2	71	0.3
TALIS average-48	78	0.2	78	0.2	71	0.2
High-performing PISA countries						
Alberta (Canada)	81	2.5	90	1.1	75	2.7
Estonia	87	0.9	90	0.8	87	0.8
Finland	77	1.6	67	1.8	78	1.3
Japan	77	1.2	67	1.2	61	1.2
Singapore	71	0.8	67	0.9	68	0.7

Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide

There has been no significant change in the proportions of Australian teachers who agreed that staff, parents or students have opportunities to participate in decision-making at their schools between TALIS 2013 and 2018. Estonia, Finland and Japan all recorded significant increases in agreement with items relating to opportunities for students and parents/guardians to participate in school decision-making between TALIS 2013 and 2018, while Singapore recorded small, but statistically significant, decreases in agreement across all three items over this time (Table 4.12).

TABLE 4.12 Changes to opportunities to participate in decisions from 2013 to 2018
Results based on responses of lower secondary teachers

	Percentage of teachers who "agree" or "strongly agree" with the following statements																	
	This school provides staff with opportunities to actively participate in school decisions						This school provides parents or guardians with opportunities to actively participate in school decisions						This school provides students with opportunities to actively participate in school decisions					
	TALIS 2013		TALIS 2018		Change between 2013 and 2018 (TALIS 2018 - TALIS 2013)		TALIS 2013		TALIS 2018		Change between 2013 and 2018 (TALIS 2018 - TALIS 2013)		TALIS 2013		TALIS 2018		Change between 2013 and 2018 (TALIS 2018 - TALIS 2013)	
	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	64	1.9	67	0.9	3	2.1	70	1.8	71	0.9	2	2.0	61	1.9	64	1.0	3	2.1
High-performing PISA countries																		
Alberta (Canada)	81	1.7	81	2.5	1	3.1	87	1.3	90	1.1	3	1.7	74	1.7	75	2.7	1	3.2
Estonia	83	1.0	87	0.9	**5**	1.4	84	1.2	90	0.8	**6**	1.5	81	1.1	87	0.8	**7**	1.3
Finland	75	1.5	77	1.6	2	2.1	60	1.4	67	1.8	**7**	2.3	65	1.5	78	1.3	**13**	2.0
Japan	76	1.2	77	1.2	2	1.7	62	1.1	67	1.2	**4**	1.6	49	1.3	61	1.2	**12**	1.8
Singapore	75	0.8	71	0.8	**-3**	1.1	72	0.8	67	0.9	**-5**	1.2	73	0.8	68	0.7	**-5**	1.1

Notes: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

The responses of teachers were compared to those of their principals, and the average proportions of teachers who were in agreement with their principals are presented for Australia, the OECD and TALIS country average and high-performing PISA countries in Table 4.13.

While the majority of Australian teachers were in agreement with their principals about whether opportunities for distributed decision-making was available at their schools, the proportion of Australian teachers whose responses matched those of their principal regarding opportunities for staff to participate in school decisions (67%) was lower than the OECD average as well as the high-performing PISA countries. Fewer Australian teachers agreed with their principals regarding parent and student opportunities for participating in school decisions compared to the OECD averages and the high-performing PISA countries Alberta (Canada) and Estonia.

TABLE 4.13 Teachers' and principals' views on opportunities to participate in decisions
Results based on responses of lower secondary teachers and principals

	Percentage of teachers who are in agreement with their principals regarding the following statements[1]					
	This school provides staff with opportunities to actively participate in school decisions		This school provides parents or guardians with opportunities to actively participate in school decisions		This school provides students with opportunities to actively participate in school decisions	
	%	S.E.	%	S.E.	%	S.E.
Australia	67	0.9	66	0.8	60	1.1
OECD average-30	77	0.3	72	0.4	68	0.4
TALIS average-47	77	0.2	72	0.3	68	0.3
High-performing PISA countries						
Alberta (Canada)	82	2.5	84	3.5	74	2.7
Estonia	87	0.9	84	2.2	82	2.0
Finland	77	1.6	60	2.0	74	1.8
Japan	76	1.4	48	1.8	48	1.5
Singapore	71	0.8	56	0.9	62	0.8

[1] Teachers are considered to be in agreement with their principals at the school level if both the teacher and the principal (within a school) "agree" or "strongly agree" or else if both "disagree" or "strongly disagree" with a given statement.

Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide.

4.4 How do teachers make use of feedback?

Feedback from peers can be viewed as a form of collaboration, in that it involves interactions and relationships between colleagues with a shared goal of improvement. In TALIS, feedback is defined as "any communication teachers receive about their teaching, based on some form of interaction with their work (e.g. observing teachers while teaching students, discussing the curriculum taught by teachers or students' results)" (OECD, 2020, p. 165). Feedback can thus be provided via formal, structured arrangements, such as peer or senior staff evaluations, or through less formal means such as group discussions. Teachers were asked whether they had received feedback while at their current school, and, if so, which methods were used and from whom the feedback was received.

Specifically, teachers were asked whether they had received feedback from:

- External individuals or bodies
- School principal or member(s) of the school management team
- Other colleagues within the school (not a part of the school management team).

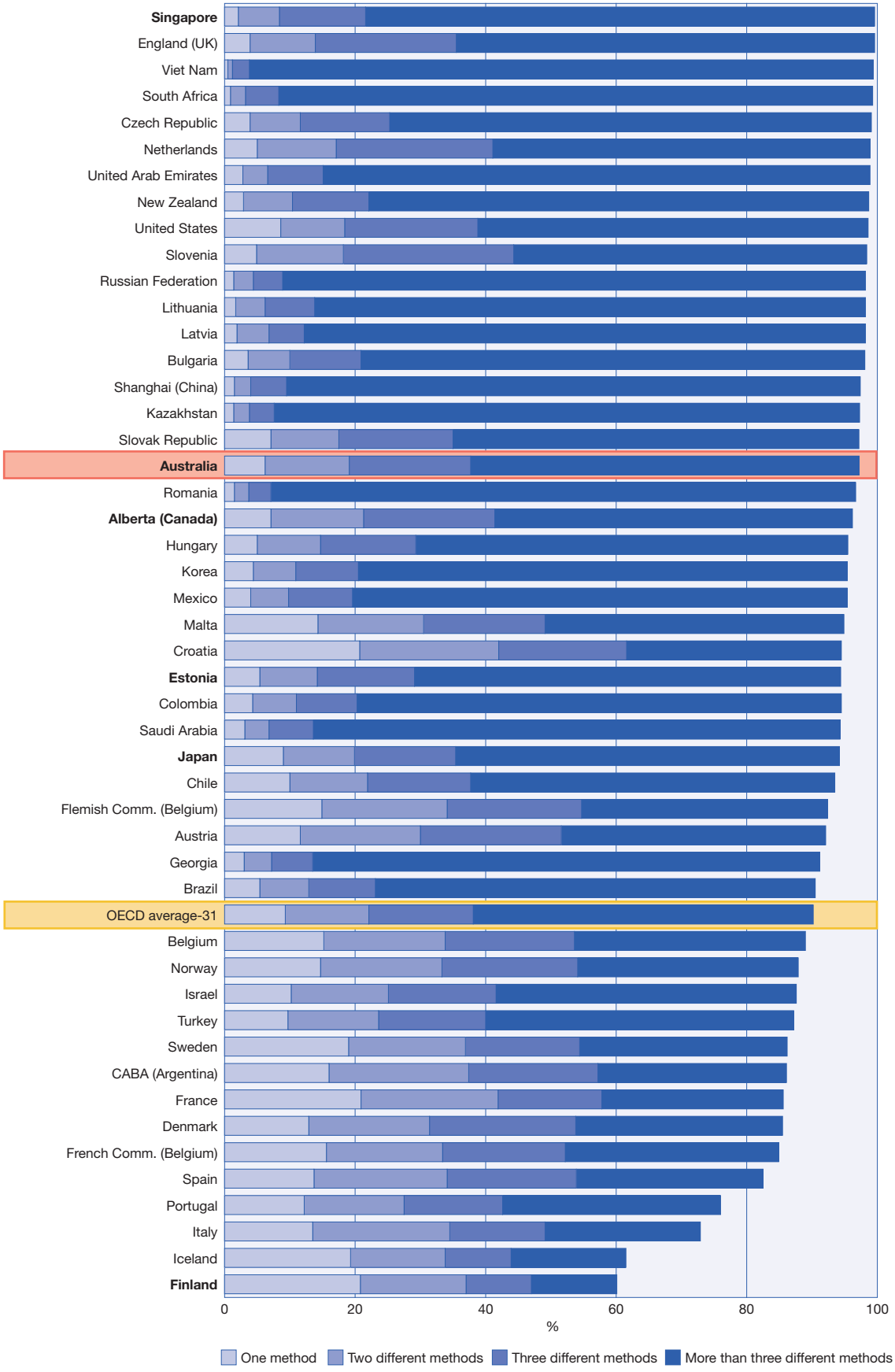
Through any of the following methods:

- Observation of my classroom teaching
- Student survey responses related to my teaching
- Assessment of my content knowledge
- External results of students I teach (e.g. national test scores)
- School-based and classroom-based results (e.g. performance results, project results, test scores)
- Self-assessment of my work (e.g. presentation of a portfolio assessment, analysis of my teaching using video).

Almost all Australian teachers (97%) reported having received feedback at their current school, while on average across the OECD, 90 per cent of teachers had received feedback. As shown in Figure 4.8, the majority of Australian teachers had received feedback in more than three different forms.

FIGURE 4.8 Use of multiple methods to provide feedback to teachers

Percentage of lower secondary teachers who have received feedback via the following numbers of different methods[1]



[1] Different methods include: "Observation of my classroom teaching"; "Student survey responses related to my teaching"; "Assessment of my content knowledge", "External results of students I teach (e.g. national test scores)"; "School-based and classroom-based results (e.g. performance results, project results, test scores)"; and "Self-assessment of my work (e.g. presentation of a portfolio assessment, analysis of my teaching using video)".

Note: High-performing PISA countries shown in bold. For explanation refer to Reader's Guide.

Among Australian teachers, there were no differences in the proportions of teachers who reported receiving feedback associated with teacher characteristics such as gender, age or years of teaching experience. On average across OECD countries, higher proportions of teachers who were older or who had more than five years experience reported receiving feedback (Table 4.14). In Finland, the difference between novice and more experienced teachers was over 15 percentage points.

TABLE 4.14 Feedback received by teachers, by teacher characteristics
Results based on responses of lower secondary teachers

	Percentage of teachers who have received feedback[1] in their school																			
	Total		By gender						By age						By number of years of teaching experience					
			Male		Female		Male - Female		Under age 30 (a)		Age 50 and above (b)		(b) - (a)		Less than or equal to 5 years (a)		More than 5 years (b)		(b) - (a)	
	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	97	0.4	98	0.7	97	0.5	0.6	0.8	96	1.1	97	0.5	1.3	1.2	96	0.9	97	0.4	1.0	1.0
OECD average-31	90	0.1	90	0.2	90	0.1	-0.2	0.2	88	0.5	90	0.2	**2.4**	0.5	88	0.3	91	0.1	**3.2**	0.4
TALIS average-48	92	0.1	92	0.2	92	0.1	**-0.6**	0.2	90	0.4	92	0.2	**1.8**	0.4	90	0.3	93	0.1	**2.6**	0.3
High-performing PISA schools																				
Alberta (Canada)	96	0.7	97	0.9	96	1.0	1.2	1.3	98	1.3	96	1.4	-2.3	1.9	98	1.0	96	0.9	**-2.7**	1.3
Estonia	94	0.5	90	1.4	95	0.4	**-5.1**	1.4	88	2.6	96	0.5	**8.6**	2.7	87	2.1	96	0.4	**8.2**	2.1
Finland	60	1.1	62	2.0	60	1.3	2.0	2.2	41	4.5	66	1.9	**25.1**	5.1	47	2.7	63	1.2	**15.9**	2.8
Japan	94	0.4	94	0.5	94	0.7	0.3	0.9	97	0.6	91	0.8	**-6.1**	1.1	96	0.8	94	0.5	-1.7	0.9
Singapore	100	0.1	100	0.1	100	0.2	0.2	0.2	100	0.1	99	0.9	-1.4	0.9	100	0.1	100	0.2	-0.4	0.2

[1] Feedback received from at least one of the following individuals or bodies: "External individuals or bodies"; "School principal or member(s) of the school management team"; and "Other colleagues within the school (not a part of the school management team)"; and based on any of the following methods: "Observation of my classroom teaching"; "Student survey responses related to my teaching"; "Assessment of my content knowledge", "External results of students I teach (e.g. national test scores)"; "School-based and classroom-based results (e.g. performance results, project results, test scores)"; and "Self-assessment of my work (e.g. presentation of a portfolio assessment, analysis of my teaching using video)".

Notes: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

Australian teachers working in rural schools reported higher levels of feedback (100%) compared to those in metropolitan locations (98%) but there were no other school-level differences. A similar difference was found for teachers in Alberta (Canada). On average across the OECD, higher proportions of teachers in privately-funded schools compared to teachers in publicly-funded schools reported receiving feedback, but there was no such difference among Australian teachers (Table 4.15).

TABLE 4.15 Feedback received by teachers, by school characteristics

Results based on responses of lower secondary teachers and principals

	Percentage of teachers who have received feedback[1] in their school																															
	Total		By school location								By school type						By concentration of students from socioeconomically disadvantaged homes[2]						By concentration of immigrant students[3]						By concentration of students with special needs[4]					
			Rural area or village (up to 3 000 people)		Town (3 001 to 100 000 people)		City (over 100 000 people)		City - Rural area		Publicly managed schools[5]		Privately managed schools[6]		Private - Public		Less than or equal to 30% (a)		More than 30% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	97	0.4	100	0.0	96	1.3	98	0.3	**-2.4**	0.3	98	0.4	97	0.8	-1.1	0.8	97	0.5	98	0.5	1.1	0.6	97	0.7	98	0.4	1.2	0.8	97	0.5	97	0.7	-0.3	0.8
OECD average-31	90	0.1	90	0.4	90	0.2	91	0.2	0.2	0.5	90	0.1	92	0.4	**2.3**	0.4	90	0.1	91	0.3	-0.4	0.4	90	0.2	86	0.5	-0.4	0.5	90	0.2	90	0.2	-0.2	0.3
TALIS average-48	92	0.1	92	0.3	92	0.1	93	0.2	0.4	0.3	92	0.1	93	0.3	**2.0**	0.3	92	0.1	92	0.3	-0.4	0.3	92	0.1	89	0.4	-0.5	0.4	92	0.1	91	0.2	-0.3	0.3
High-performing PISA schools																																		
Alberta (Canada)	96	0.7	100	0.0	94	1.8	96	0.9	**-3.8**	0.9	96	0.8	c	c	c	c	96	0.8	98	1.2	1.7	1.4	96	1.1	96	0.9	0.3	1.5	96	1.2	97	0.7	1.5	1.4
Estonia	94	0.5	93	1.0	95	0.7	95	0.8	**2.9**	1.3	94	0.5	95	2.4	0.5	2.5	95	0.5	90	2.4	**-5.1**	2.4	94	0.5	c	c	c	c	95	0.4	92	1.4	**-3.0**	1.5
Finland	60	1.1	61	3.7	59	1.7	63	1.8	1.4	4.2	60	1.2	69	2.9	**9.4**	3.0	60	1.2	c	c	c	c	60	1.3	61	2.1	0.7	2.5	60	1.5	61	2.1	1.7	2.7
Japan	94	0.4	c	c	96	0.6	93	0.6	c	c	94	0.4	92	2.1	-2.6	2.1	94	0.4	97	1.0	**2.6**	1.1	94	0.4	c	c	c	c	94	0.4	93	1.6	-1.2	1.7
Singapore	100	0.1	a	a	a	a	100	0.1	a	a	100	0.1	99	1.0	-1.3	1.1	100	0.1	c	c	c	c	100	0.1	99	0.3	-0.3	0.3	100	0.1	99	0.5	-0.3	0.5

[1] Feedback received from at least one of the following individuals or bodies: "External individuals or bodies"; "School principal or member(s) of the school management team"; and "Other colleagues within the school (not a part of the school management team)"; and based on any of the following methods: "Observation of my classroom teaching"; "Student survey responses related to my teaching"; "Assessment of my content knowledge", "External results of students I teach (e.g. national test scores)"; "School-based and classroom-based results (e.g. performance results, project results, test scores)"; and "Self-assessment of my work (e.g. presentation of a portfolio assessment, analysis of my teaching using video)".

[2] "Socioeconomically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care.

[3] "Immigrant students" refers to "students who are immigrants or with a migrant background", as reported by the school principal. An "immigrant student" is one who was born outside the country. A "student with a migrant background" has parents who were both born outside the country.

[4] Students with special needs are those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged.

[5] A publicly managed school is a school whose principal reported that it is managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise. In the Principal Questionnaire, this question does not make any reference to the source of the school's funding which is reported in the preceding question.

[6] A privately managed school is a school whose principal reported that it is managed by a non-governmental organisation (e.g. a church, trade union, business or other private institution). In the Principal Questionnaire, this question does not make any reference to the source of the school's funding, which is reported in the preceding question. In some countries, the privately managed schools category includes schools that receive significant funding from the government (government-dependent private schools).

Notes: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

4.5 Sources of feedback

The vast majority of Australian teachers reported receiving feedback from their school (96%), while around one-third received feedback from external sources (34%). These results were similar to those across OECD countries on average and across TALIS 2018 countries on average (Table 4.16). While the actual proportions of teachers receiving feedback from external and school sources varied greatly across the high-performing PISA countries, the general pattern of higher proportions receiving feedback from school sources compared to external sources held.

TABLE 4.16 Source of feedback to teachers

Results based on responses of lower secondary teachers

	Percentage of teachers who have received feedback[1] from the following individuals or bodies									
	External individuals or bodies		School-level feedback		Components of school-level feedback				No feedback received in their school	
					School principal, member(s) of the school management team		Other colleagues within the school[2]			
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia	34	1.0	96	0.4	75	0.9	85	0.9	3	0.4
OECD average-31	38	0.2	87	0.1	76	0.2	58	0.2	10	0.1
TALIS average-48	40	0.2	90	0.1	80	0.1	57	0.2	8	0.1
High-performing PISA schools										
Alberta (Canada)	45	2.2	95	0.8	91	1.2	53	2.4	4	0.7
Estonia	40	1.2	93	0.6	88	0.9	59	1.5	6	0.5
Finland	19	0.9	56	1.2	39	1.5	36	1.1	40	1.1
Japan	41	1.1	91	0.5	75	1.1	71	1.0	6	0.4
Singapore	22	0.7	99	0.2	92	0.5	72	0.8	0	0.1

[1] Feedback received based on any of the following methods: "Observation of my classroom teaching"; "Student survey responses related to my teaching"; "Assessment of my content knowledge", "External results of students I teach (e.g. national test scores)"; "School-based and classroom-based results (e.g. performance results, project results, test scores)"; and "Self-assessment of my work (e.g. presentation of a portfolio assessment, analysis of my teaching using video)".

[2] Other colleagues within the school who are not part of the school management team.

Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide

4.6 Methods used for providing feedback

The most common method of providing feedback reported by Australian teachers was observation of their classroom teaching – 85 per cent of Australian teachers reported receiving feedback this way, compared to 80 per cent of teachers on average across OECD countries (Figure 4.9). Fewer Australian teachers, compared to the OECD average, reported being assessed on their content knowledge.

FIGURE 4.9 Methods of providing feedback to teachers

Percentage of lower secondary teachers reporting they have received feedback via the following methods (Australia and OECD)

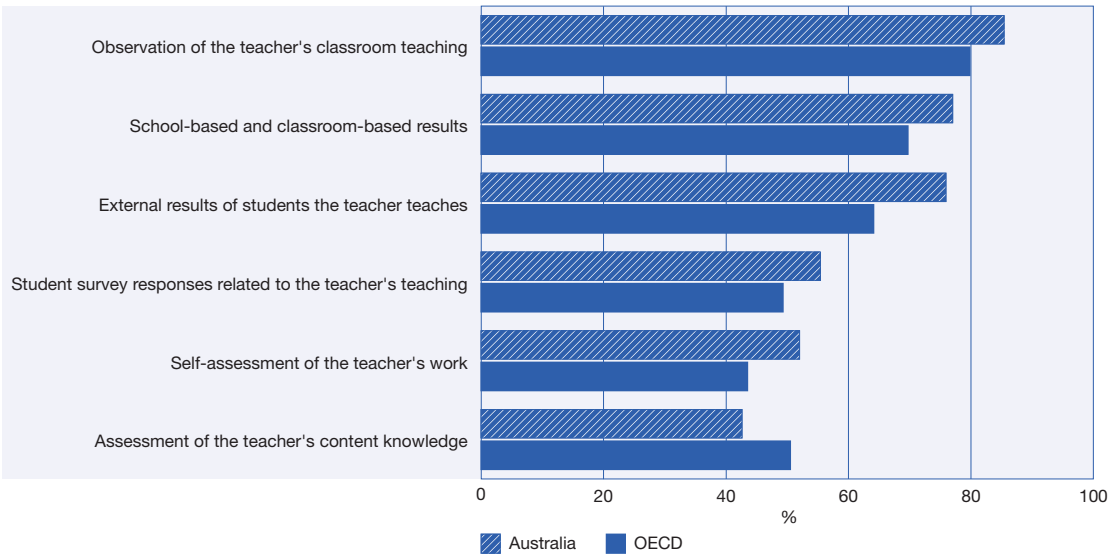
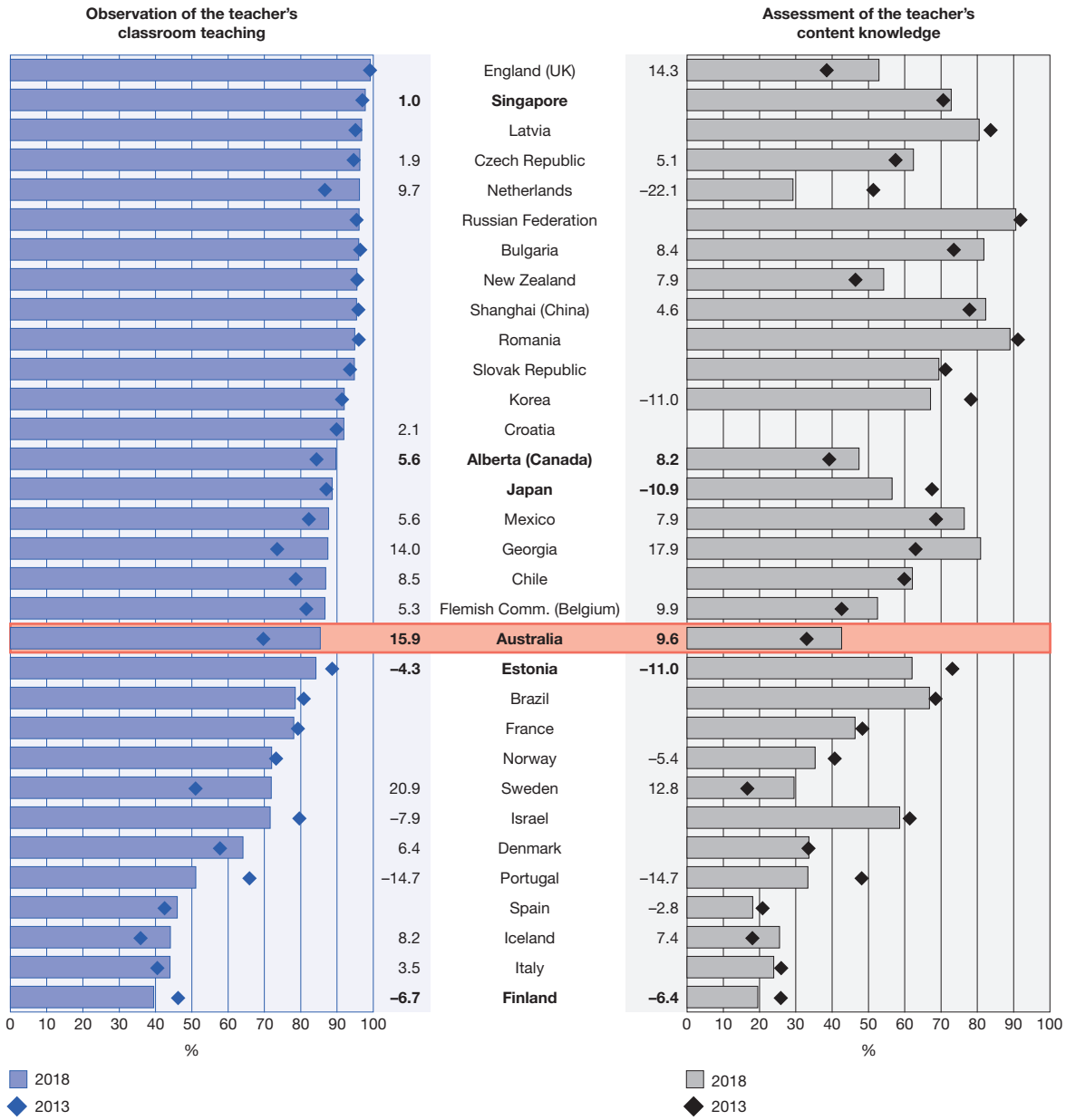


Figure 4.10 presents a comparison of results from TALIS 2013 and 2018 pertaining to how teachers more commonly receive feedback, focusing on observation of the teacher in their classroom and assessment of teachers' content knowledge. According to these results, Australian teachers have experienced a significant increase in feedback in terms of direct observation of their classroom interactions as well as assessment of their content knowledge between the 2013 and 2018 cycles of TALIS. More than 85 per cent of Australian teachers received feedback after observation of their classroom, up from 70 per cent in TALIS 2013. While the proportion of Australian teachers who reported having been assessed on their content knowledge remains below the OECD average in TALIS 2018 (43% compared to 50%, see Figure 4.9), there has been a significant increase in this method of feedback since TALIS 2013 (33%). Similar growth in these methods of feedback was noted in Alberta (Canada), while the proportions of teachers in Estonia and Finland who have received feedback through these methods has declined significantly between TALIS 2013 and TALIS 2018.

FIGURE 4.10 Change in feedback to teachers from 2013 to 2018

Percentage of lower secondary teachers who have received feedback via the following methods



Notes: Only countries and economies with available data for 2013 and 2018 are shown. Statistically significant changes between 2013 and 2018 (TALIS 2018 - TALIS 2013) are found next to the category and the country/economy name. High-performing PISA countries shown in bold. For explanation refer to Reader's Guide.

BOX 4.3 Comparing Australian primary and lower secondary teachers' experiences of feedback

Responses of Australian primary and lower secondary teachers indicated overall similarity in the sources of feedback – the majority of teachers received feedback from their schools rather than from external sources. The source *within* the school, however, appeared to differ for primary and lower secondary teachers, with the proportion of primary teachers reporting that they received feedback from their principal or member of the school leadership team (83%) being higher than the proportion who received feedback from other colleagues (76%). Among lower secondary teachers, the pattern was reversed, with higher proportions receiving feedback from other colleagues (85%) than from principals or members of the school leadership team (75%). The proportion of primary teachers who had not received any feedback was higher than among lower secondary teachers (Table A4.3).

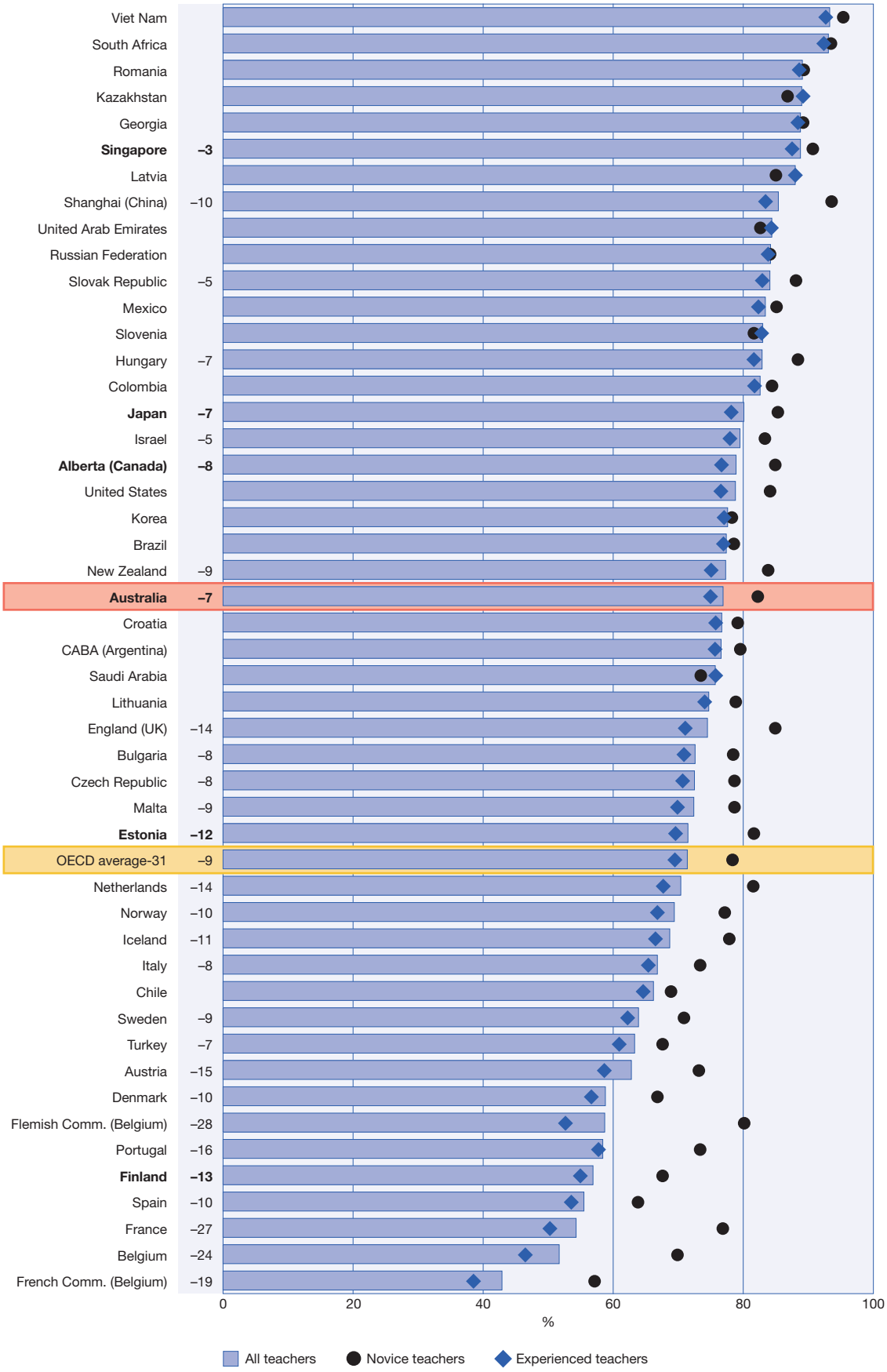
When the focus was on the methods of feedback, Australian lower secondary teachers reported receiving feedback through student surveys about their teaching and students' external results at higher rates than did their counterparts working in primary schools (Table A4.4). Feedback following classroom observations or self-assessment of the teachers' work was similar across primary and lower secondary teachers.

4.7 Teachers' perceptions of the impact of feedback

TALIS asked teachers whether feedback they received in the 12 months prior to the survey had a positive impact on their teaching practice. Among Australian teachers who had received feedback, the majority (77%) indicated that it had been useful and improved their teaching. Novice Australian teachers, those who had been teaching for five years or fewer, reported higher rates of useful feedback than did their more experienced colleagues – 83 per cent compared to 75 per cent. This pattern of greater impact of feedback reported by novice teachers compared to more experienced teachers was also evident across OECD countries on average and in the high-performing PISA participants Japan, Alberta (Canada) and Finland (Figure 4.11).

FIGURE 4.11 Impact of feedback on teaching, by teachers' teaching experience

Percentage of lower secondary teachers who reported that the feedback they received in the 12 months prior to the survey had a positive impact on their teaching practice[1]



[1] The analysis is restricted to the subset of teachers who reported having received feedback at their current school.

Notes: Statistically significant differences between experienced teachers (with more than 5 years of experience) and novice teachers (with less than or equal to 5 years of experience) are shown next to the country/economy name. High-performing PISA countries shown in bold. For explanation refer to Reader's Guide.

For Australian teachers, years of experience was the only teacher-level characteristic to show differences in the proportions of teachers who reported receiving feedback that had a positive impact on their teaching practices (Table 4.17). Across the OECD on average, there were significant differences between male and female teachers (in favour of females) and older and younger teachers, with teachers aged under 30 years reporting higher rates of impactful feedback than those aged 50 years or older. The age-related difference was also found in Estonia, Finland and Japan.

TABLE 4.17 Impact of feedback on teaching, by teacher characteristics
Results based on responses of lower secondary teachers

	Percentage of teachers[1] who report that the feedback they received in the 12 months prior to the survey had a positive impact on their teaching practice																			
	Total		By gender						By age						By number of years of teaching experience					
			Male		Female		Male - Female		Under age 30 a)		Age 50 and above b)		b) - a)		Less than or equal to 5 years a)		More than 5 years b)		b) - a)	
	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	77	1.0	76	1.6	77	1.2	-1	2.0	83	1.7	78	1.6	-5	2.5	83	1.6	75	1.2	**-7**	1.9
OECD average-31	71	0.2	70	0.4	72	0.2	**-2**	0.4	79	0.6	70	0.4	**-9**	0.7	79	0.5	70	0.2	**-9**	0.5
TALIS average-48	76	0.2	74	0.3	76	0.2	**-3**	0.3	81	0.5	74	0.3	**-7**	0.6	81	0.4	74	0.2	**-7**	0.4
High-performing PISA countries																				
Alberta Canada)	79	1.8	81	2.8	78	1.6	4	2.6	87	2.9	81	2.8	-5	4.4	85	2.8	77	2.1	**-8**	3.4
Estonia	72	1.2	68	2.4	72	1.3	-4	2.5	84	3.0	70	1.6	**-14**	3.2	82	2.0	70	1.4	**-12**	2.2
Finland	57	1.3	55	2.3	58	1.7	-3	2.9	73	6.2	55	2.3	**-17**	6.9	68	3.5	55	1.4	**-13**	3.7
Japan	80	0.9	80	1.2	80	1.2	-1	1.5	84	1.5	76	1.7	**-8**	2.4	86	1.5	78	1.1	**-7**	1.8
Singapore	89	0.6	88	1.1	89	0.7	-1	1.3	90	1.1	90	1.5	0	1.9	91	0.9	88	0.8	**-3**	1.3

[1] The analysis is restricted to the subset of teachers who reported to have received feedback at their current school.

Notes: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

Among Australian teachers, there were no school-level differences in the proportions of teachers who reported receiving feedback that had a positive impact on their teaching practices (Table 4.18). Across the OECD on average, and among Estonian teachers, reports of impactful feedback were higher among teachers in private schools than public schools, while among Japanese teachers, the opposite was true.

TABLE 4.18 Impact of feedback on teaching, by school characteristics

Results based on responses of lower secondary teachers and principals

	Percentage of teachers[1] who report that the feedback they received in the 12 months prior to the survey had a positive impact on their teaching practice																													
	Total		By school location								By school type						By concentration of students from socioeconomically disadvantaged homes[2]						By concentration of immigrant students[3]						By concentration of students with special needs[4]					
			Rural area or village (up to 3 000 people)		Town (3 001 to 100 000 people)		City (over 100 000 people)		City - Rural area		Publicly managed schools[5]		Privately managed schools[6]		Private - Public		Less than or equal to 30% (a)		More than 30% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	77	1.0	80	5.1	73	2.5	78	1.0	-1.9	5.2	78	1.1	75	1.7	-2.6	1.9	76	1.3	78	1.6	2.0	2.0	76	1.5	78	1.2	2.2	1.8	77	1.3	77	1.9	-0.3	2.3
OECD average-31	71	0.2	72	0.6	71	0.3	71	0.4	-1.2	0.8	71	0.2	72	0.6	**3.1**	0.7	71	0.2	71	0.6	0.3	0.7	71	0.3	67	0.6	1.3	0.7	71	0.3	72	0.5	0.6	0.5
TALIS average-48	76	0.2	76	0.5	75	0.3	75	0.3	**-1.4**	0.6	75	0.2	77	0.5	**2.7**	0.5	76	0.2	75	0.5	0.1	0.6	75	0.2	72	0.5	0.9	0.6	75	0.2	73	0.5	0.0	0.5
High-performing PISA countries																																		
Alberta (Canada)	79	1.8	85	4.3	77	2.6	78	2.0	-6.6	4.4	79	1.5	c	c	c	c	79	2.0	78	4.1	-1.1	4.8	80	2.2	77	2.4	-2.8	3.0	77	3.0	81	1.7	3.3	3.5
Estonia	72	1.2	69	1.6	72	2.1	74	2.5	4.4	3.0	71	1.3	83	4.1	**11.5**	4.1	72	1.3	72	5.1	-0.1	5.3	72	1.3	c	c	c	c	72	1.4	70	2.2	-2.0	2.6
Finland	57	1.3	52	4.1	57	1.8	60	2.6	8.0	4.8	57	1.4	54	4.4	-3.4	4.5	57	1.4	c	c	c	c	56	1.5	60	3.6	3.9	4.0	57	1.8	57	2.1	-0.1	2.9
Japan	80	0.9	c	c	84	1.7	78	1.1	c	c	82	0.9	67	3.8	**-14.8**	3.9	80	1.0	83	2.4	3.3	2.6	80	1.0	c	c	c	c	80	1.0	82	3.5	1.7	3.7
Singapore	89	0.6	a	a	a	a	89	0.6	a	a	89	0.5	87	3.3	-1.6	3.4	89	0.6	c	c	c	c	88	0.7	90	1.0	1.8	1.2	89	0.6	89	1.9	-0.1	2.1

[1] The analysis is restricted to the subset of teachers who reported to have received feedback at their current school.

[2] "Socioeconomically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care.

[3] "Immigrant students" refers to "students who are immigrants or with a migrant background", as reported by the school principal. An "immigrant student" is one who was born outside the country. A "student with a migrant background" has parents who were both born outside the country.

[4] Students with special needs are those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged.

[5] A publicly managed school is a school whose principal reported that it is managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise. In the Principal Questionnaire, this question does not make any reference to the source of the school's funding which is reported in the preceding question.

[6] A privately managed school is a school whose principal reported that it is managed by a non-governmental organisation (e.g. a church, trade union, business or other private institution). In the Principal Questionnaire, this question does not make any reference to the source of the school's funding, which is reported in the preceding question. In some countries, the privately managed schools category includes schools that receive significant funding from the government (government-dependent private schools).

Notes: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

4.8 Forms of impactful feedback for teachers

Among those teachers who had received feedback in the 12 months prior to taking part in TALIS, higher proportions of Australian teachers, compared to the OECD average, reported positive impact on their knowledge and understanding of their subject field, pedagogical competencies and use of student assessment to improve student learning (Table 4.19). More than half of Australian teachers, and those across OECD countries on average, reported a positive impact of feedback on their pedagogical practices or use of student assessment to improve learning. Singapore reported one of the highest levels of teacher feedback (nearly universal) and had some of the highest proportions of teachers reporting positive impact of feedback in a number of areas.

TABLE 4.19 Positive impact of feedback on teaching practices
Results based on responses of lower secondary teachers

	Percentage of teachers who have received feedback in their school (a)		Among (a), percentage of teachers who report that the feedback they received in the 12 months prior to the survey led to a positive change in the following teaching practices											
			Knowledge and understanding of my main subject field(s)		Pedagogical competencies in teaching the teacher's subject		Use of student assessments to improve student learning		Classroom management		Methods for teaching students with special needs		Methods for teaching in a multicultural or multilingual setting	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia	97	0.4	46	0.9	59	1.0	55	1.0	43	1.3	35	1.0	18	0.9
OECD average-31	90	0.1	45	0.2	55	0.2	50	0.2	45	0.2	35	0.3	18	0.2
TALIS average-48	92	0.1	52	0.2	61	0.2	57	0.2	53	0.2	37	0.2	23	0.2
High-performing PISA countries														
Alberta (Canada)	96	0.7	48	2.1	58	2.3	62	1.9	48	2.0	39	2.2	28	1.9
Estonia	94	0.5	48	1.5	56	1.4	53	1.3	45	1.3	35	1.3	16	1.3
Finland	60	1.1	35	1.3	38	1.3	30	1.4	30	1.4	27	1.1	12	0.9
Japan	94	0.4	68	1.1	73	1.0	55	1.0	38	1.0	42	1.0	13	0.7
Singapore	100	0.1	71	0.8	80	0.8	76	0.7	64	0.9	35	0.9	29	1.0

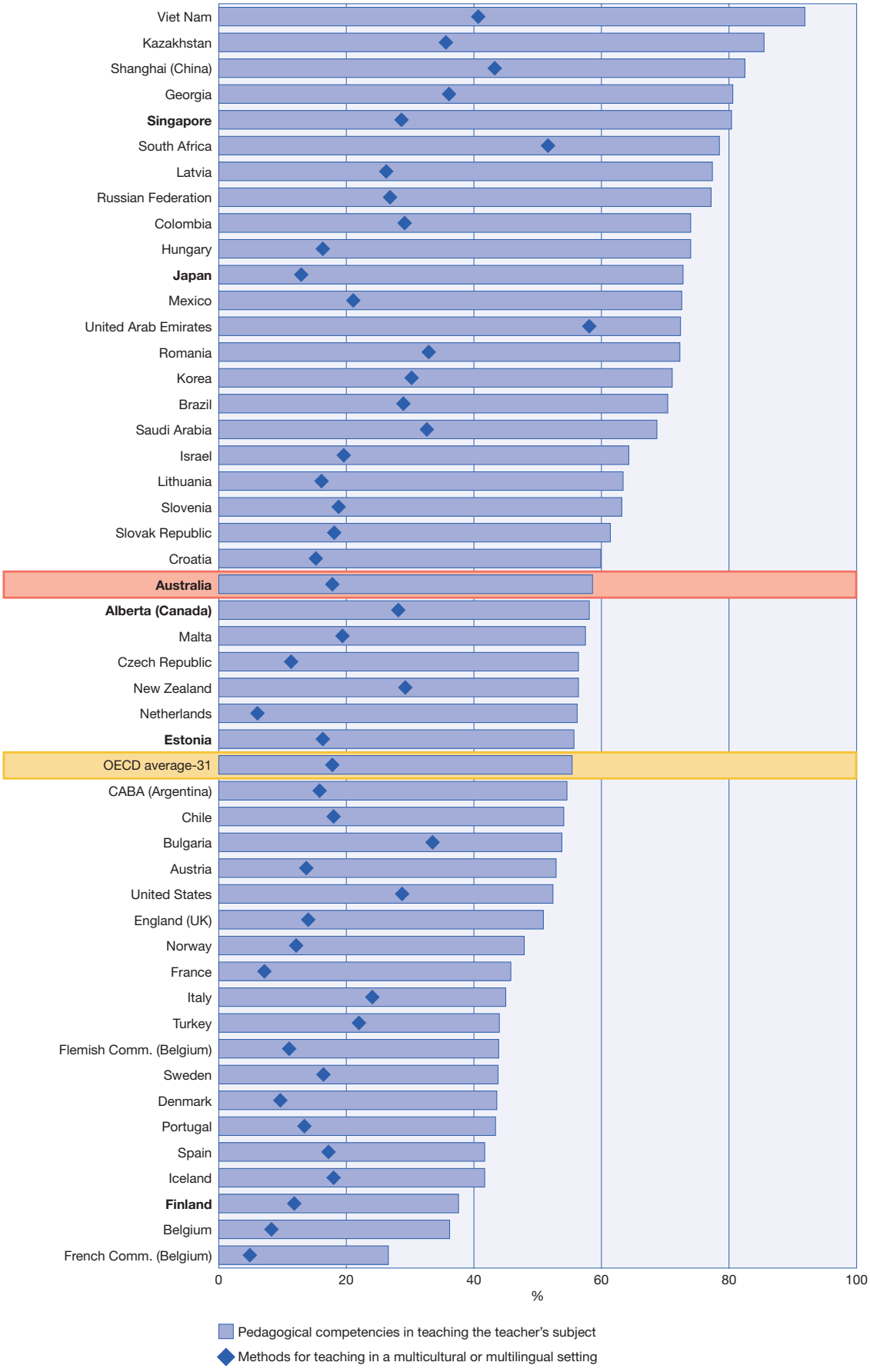
Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide

Figure 4.12 provides a comparison of teachers' reports of positive impact of feedback on their practices in terms of pedagogical competencies and methods for teaching in multicultural or multilingual classrooms.

While feedback had a greater positive impact on general areas of competence, according to teachers' reports, it was less useful in specific contexts, such as teaching students with special needs or in multicultural or multilingual classrooms. Only 18 per cent of Australian teachers reported a positive impact of feedback on their methods for teaching in a multicultural or multilingual setting, which was similar to the OECD average.

FIGURE 4.12 Positive impact of feedback on teaching practices

Percentage of lower secondary teachers who reported that the feedback they received in the 12 months prior to the survey led to a positive change in the following teaching practices[1]



[1] The analysis is restricted to the subset of teachers who reported having received feedback at their current school.

Note: High-performing PISA countries shown in bold. For explanation refer to Reader's Guide.

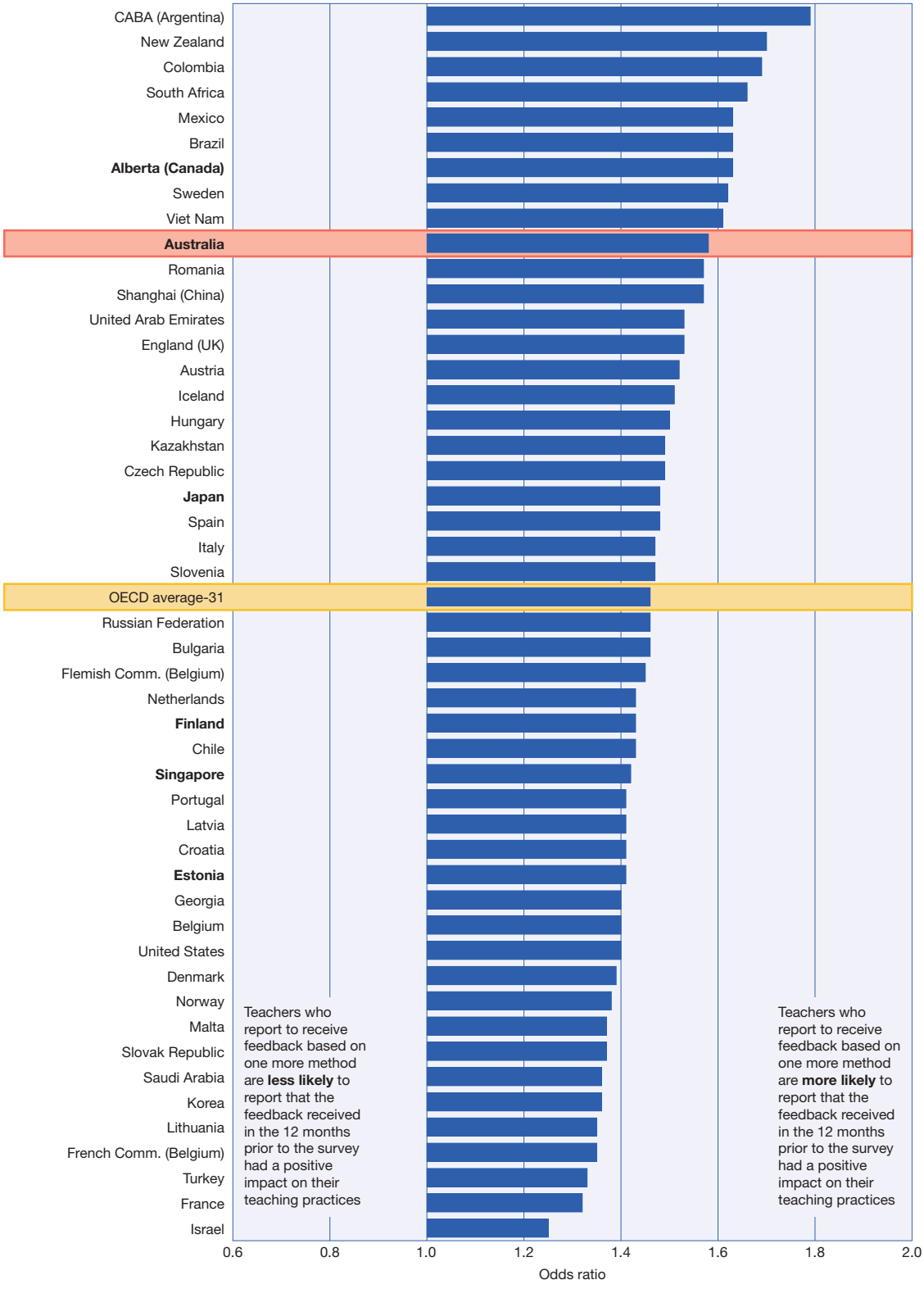
4.9 What makes feedback useful?

The final section of this chapter focuses on the results of regression models that examine the relationships between the number of and specific methods of feedback and the likelihood of teachers finding that feedback impactful.

Focusing first on the number of ways feedback is provided, logistic regression analyses indicated that, after controlling for teachers' own characteristics (gender, age, years of experiences at current school and employment status), teachers were more likely to report finding feedback useful for their teaching practices when the feedback came from multiple sources, and less likely to find feedback from a single source useful (Figure 4.13). Among Australian teachers, and across all participating TALIS countries, those who received feedback via more than one method were more likely to indicate that feedback had had a positive impact on their teaching practices. This relationship held after controlling for teacher characteristics such as gender, age and years of teaching experience.

FIGURE 4.13 Relationship between impactful feedback and number of different methods based on which feedback is provided

Likelihood of reporting feedback to have a positive impact related to the number of different methods based on which teachers received feedback



Notes: Results of binary logistic regression based on responses of lower secondary teachers. An odds ratio indicates the degree to which an explanatory variable is associated with a categorical outcome variable. An odds ratio below one denotes a negative association; an odds ratio above one indicates a positive association; and an odds ratio of one means that there is no association. The analysis is restricted to the subset of teachers who report to have received feedback at their current school. The predictor refers 1-6 different methods. Controlling for the following teacher characteristics: gender, working full-time and years of experience as a teacher. Statistically significant coefficients are marked in a darker tone. High-performing PISA countries shown in bold. For explanation refer to Reader's Guide.

A set of logistic regression analyses indicated that most forms of feedback were useful, apart from using external results of the teacher's students, but some, including observation of the teacher's classroom teaching and assessment of the teacher's content knowledge, appeared more useful (Table 4.20). In Australia, and across OECD countries on average, teachers who reported having been observed while teaching their classes and who had had their content knowledge assessed were twice as likely to report that the feedback was useful, irrespective of other forms of feedback received or teacher's other characteristics. In Alberta (Canada), teachers who had their classroom teaching observed were almost five times as likely to report that the feedback had a positive impact on their teaching. Among Australian teachers, there was no association between receiving feedback based on students' external results and feedback having an impact – those who received this form of feedback were neither more nor less likely to report a positive impact of the feedback – whereas among Singaporean teachers, receiving feedback of this sort reduced the likelihood that teachers would find the feedback useful.

TABLE 4.20 Relationship between impactful feedback, methods based on which teachers receive feedback and teacher characteristics

Results of binary logistic regression based on responses of lower secondary teachers[1, 2]

	Receiving impactful feedback[3]																			
	Dependent on:																			
	Observation of the teacher's classroom teaching[4]		School-based and classroom-based results[4]		Student survey responses related to the teacher's teaching[4]		Assessment of the teacher's content knowledge[4]		External results of students the teacher teaches[4]		Self-assessment of the teacher's work[4]		Female[5]		Age[6]		Years of experience as a teacher at current school[6]		Working full-time[7]	
	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
Australia	**2.24**	0.36	**1.70**	0.26	**1.51**	0.17	**1.99**	0.25	0.90	0.12	**1.77**	0.24	1.06	0.14	1.00	0.01	**0.98**	0.01	0.99	0.14
OECD average-31	**2.20**	0.12	**1.65**	0.06	**1.34**	0.04	**1.94**	0.06	1.03	0.03	**1.60**	0.05	**1.23**	0.03	**0.99**	0.00	**0.98**	0.00	0.97	0.03
TALIS average-48	**2.36**	0.12	**1.79**	0.06	**1.35**	0.03	**1.90**	0.05	1.03	0.03	**1.67**	0.05	**1.27**	0.03	**0.99**	0.00	**0.98**	0.00	1.05	0.03
High-performing PISA countries																				
Alberta (Canada)	**4.66**	1.70	1.55	0.44	1.14	0.34	**2.90**	0.50	1.14	0.28	**1.99**	0.46	0.80	0.18	1.00	0.01	**0.97**	0.02	1.04	0.44
Estonia	**1.92**	0.34	**1.63**	0.26	1.00	0.12	**2.35**	0.26	0.94	0.15	**1.48**	0.19	1.30	0.20	0.99	0.01	**0.98**	0.01	0.96	0.11
Finland	**2.13**	0.31	**1.53**	0.20	1.08	0.14	**2.12**	0.30	1.07	0.12	1.37	0.24	1.18	0.15	1.00	0.01	**0.96**	0.01	0.89	0.20
Japan	**2.04**	0.36	**1.72**	0.21	1.09	0.13	**1.93**	0.18	1.04	0.11	**1.81**	0.20	1.08	0.12	**0.99**	0.01	**0.98**	0.01	1.25	0.22
Singapore	1.62	0.66	**2.81**	0.62	**1.38**	0.22	**2.14**	0.33	**0.73**	0.10	1.22	0.18	0.98	0.13	1.00	0.01	1.00	0.01	0.67	0.22

[1] An odds ratio indicates the degree to which an explanatory variable is associated with a categorical outcome variable. An odds ratio below one denotes a negative association; an odds ratio above one indicates a positive association; and an odds ratio of one means that there is no association.

[2] The analysis is restricted to the subset of teachers who reported having received feedback at their current school.

[3] Dummy variable: the reference category refers to teachers reporting that none of the feedback received in the 12 months prior to the survey had a positive impact on their teaching practice.

[4] Dummy variable: the reference category refers to teachers reporting that they do not receive feedback based on the respective method.

[5] Dummy variable: the reference category is male.

[6] Number of years.

[7] Dummy variable: the reference category is working part-time.

Notes: Statistically significant values are indicated in bold. For explanation of the selection of high-performing PISA countries, refer to the Reader's Guide.

Across all TALIS countries, teachers who reported a positive impact of feedback also reported higher levels of satisfaction than teachers who did not find feedback useful (after controlling for teachers' characteristics). This positive association between impactful feedback and teacher satisfaction remained after controlling for teacher collegiality (teachers' reports of their relationships with their colleagues), further highlighting the importance of feedback as a means of improving teaching practices and increasing teachers' satisfaction with their profession (Table 4.21).

TABLE 4.21 Relationship between job satisfaction, impactful feedback, teacher characteristics and collegiality
Results of linear regression based on responses of lower secondary teachers[1]

	Index of job satisfaction[2]														
	Dependent on:														
	Receiving impactful feedback[3]		Female[4]		Age[5]		Years of experience as a teacher at current school[5]		Working full-time[6]		Collaborative school culture characterised by mutual support[7]		Teachers can rely on each other[8]		
	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	R-squared
Australia	**0.84**	0.11	0.14	0.11	-0.01	0.01	**0.02**	0.01	0.16	0.12	**1.43**	0.11	**1.45**	0.22	0.18
OECD average-31	**0.66**	0.02	**0.15**	0.02	**0.00**	0.00	**0.01**	0.00	0.01	0.03	**1.16**	0.03	**0.97**	0.03	0.15
TALIS average-48	**0.69**	0.02	**0.10**	0.02	0.00	0.00	**0.01**	0.00	0.01	0.02	**1.16**	0.02	**0.93**	0.03	0.14
High-performing PISA countries															
Alberta (Canada)	**0.67**	0.25	0.21	0.19	**0.02**	0.01	-0.01	0.02	**-0.43**	0.19	**1.57**	0.23	**1.24**	0.36	0.18
Estonia	**0.66**	0.08	0.08	0.11	-0.01	0.00	0.00	0.00	-0.10	0.07	**1.02**	0.12	**0.46**	0.15	0.10
Finland	**0.57**	0.11	0.02	0.11	-0.01	0.01	0.00	0.01	0.25	0.22	**1.08**	0.13	**0.99**	0.18	0.11
Japan	**0.43**	0.11	**-0.18**	0.07	0.00	0.00	**0.03**	0.01	**-0.54**	0.10	**0.82**	0.13	**0.91**	0.13	0.11
Singapore	**0.86**	0.12	-0.09	0.09	**0.01**	0.00	0.00	0.01	0.01	0.19	**1.31**	0.11	**1.35**	0.14	0.18

[1] The analysis is restricted to the subset of teachers who reported to have received feedback at their current school.

[2] The index of job satisfaction measures teachers' satisfaction with their current work environment and satisfaction with the profession.

[3] Dummy variable: the reference category refers to teachers reporting that none of the feedback received in the 12 months prior to the survey had a positive impact on their teaching practice.

[4] Dummy variable: the reference category is male.

[5] Number of years.

[6] Dummy variable: the reference category is working part-time.

[7] Dummy variable: the reference category is to "strongly disagree" or "disagree" with the statement that there is a collaborative school culture which is characterised by mutual support.

[8] Dummy variable: the reference category is to "strongly disagree" or "disagree" with the statement that teachers can rely on each other.

Notes: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

BOX 4.4 Comparing Australian primary and lower secondary teachers' views of impactful feedback

Higher proportions of Australian primary teachers, compared to their counterparts in lower secondary schools, reported a positive impact of feedback on five of the focus areas: Knowledge and understanding of my main subject field(s); Pedagogical competencies in teaching the teacher's subject; Use of student assessments to improve student learning; Classroom management; and Methods for teaching students with special needs.

CHAPTER 5

Empowering teachers and school leaders

Key findings

- Australian principals reported higher rates of autonomy than the OECD average in tasks such as appointing and hiring teachers, and budget allocations within the school.
- Autonomy in policies relating to student assessment or determining course content was on par with or slightly lower than the OECD average.
- Almost all Australian principals reported that their school management team included the principal and/or the vice principals, but only 30 per cent included teachers.
- Australian principals reported greater support for student achievement among their schools' parents and guardians than on average across the OECD.
- Over 90 per cent of Australian principals were satisfied with the level of support they received from school staff, and only 45% felt that they needed more support from external authorities.
- The proportions of Australian teachers who agreed that their profession is valued by policy-makers and the media were higher than the OECD average.

5.1 Introduction

This chapter focuses on the leadership and autonomy of school leaders (principals) and teachers, a key school-level factor in student development and performance (see OECD, 2020). The chapter begins with a comparison of autonomy at the school level with the level of involvement of external authorities. Decision-making within the school, by principals and teachers, is then examined. The focus then moves to principals' experiences of leadership, including system and instructional leadership, and relationships between system leadership and community engagement. The next section includes description of teachers' responsibilities and autonomy, and exploration of the relationships between teachers' autonomy and other teacher outcomes, such as self-efficacy and job satisfaction and leadership. The chapter concludes with description of teachers' perceptions of their relationships with stakeholders, including policy-makers and the media.

5.2 Autonomy in school decision-making

Despite a range of policies and practices across education systems, the OECD has identified "a general international trend towards a devolution of responsibilities for budget management, staffing, educational provisions, teaching content and processes, and the organisation of learning to the local level, including schools" (OECD, 2013, p.45). Rather than schools enacting policies and decisions made by a central authority, globally schools are becoming more responsible for making decisions that influence their capacity to deliver quality education to their students.

TALIS 2018 asked school principals to indicate who had significant responsibility for a series of tasks at the school level:

- principals
- other members of the school management team
- teachers
- school governing boards
- local/regional/state or federal authorities.

Tasks were divided into four groups:

- staffing (appointing and hiring teachers; dismissing or suspending teachers)
- budget (deciding budget allocations within the school; establishing teachers' starting salaries; determining teachers' salary increases)
- school policies (establishing student disciplinary policies and procedures; approving student admissions; establishing student assessment policies)
- curriculum and instructional policies (choosing learning materials; deciding which courses are offered; determining course content).

Schools were categorised as *autonomous* for a task where significant responsibility lay with the school principal, school management team, teachers or the school governing board. Schools were categorised as *non-autonomous* for a task where responsibility sat with local municipalities, regional, state or federal authorities. *Mixed-autonomous* schools were those where significant responsibilities for a task were shared, with the school (principal, school management team, teachers or the school governing board) and external authorities (local municipalities, regional, state or federal authorities) both having significant responsibilities for a given task.

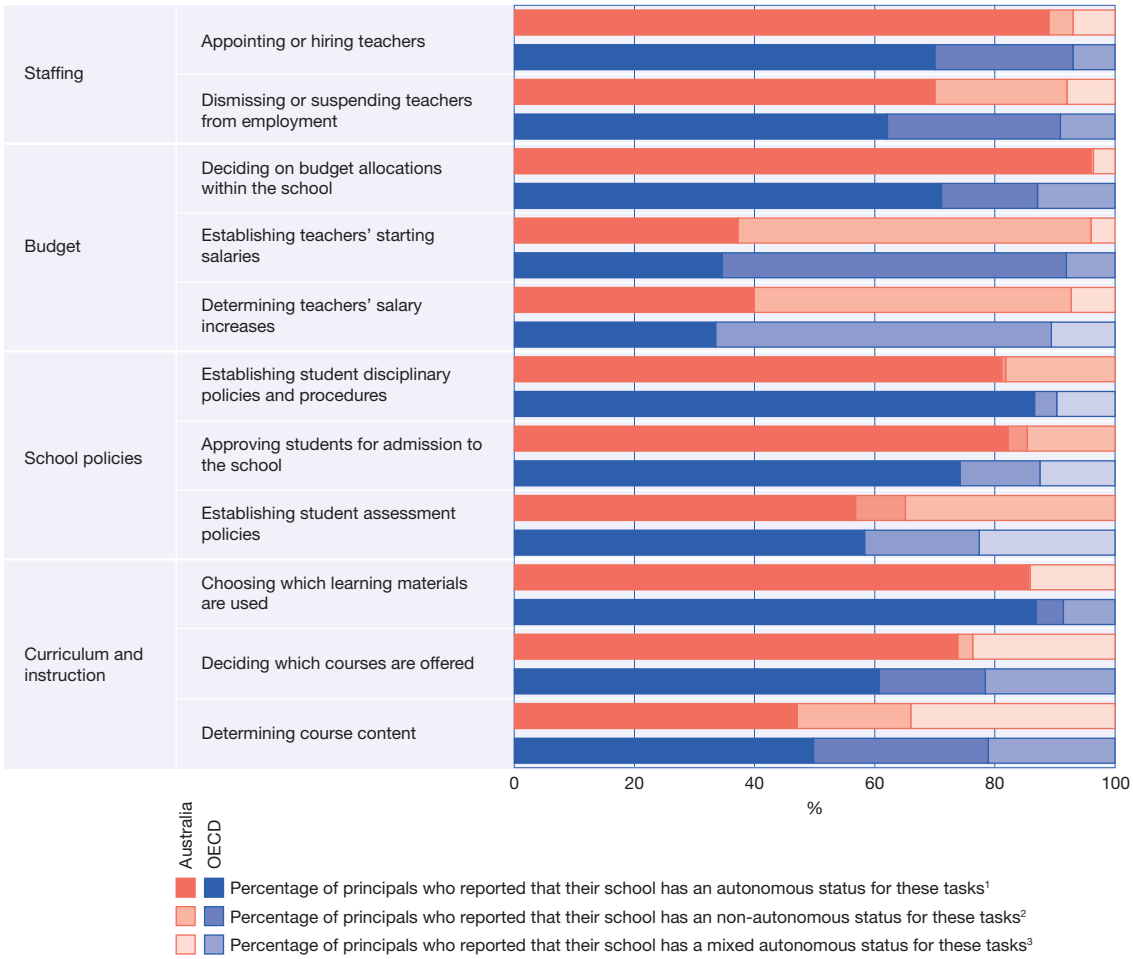
The proportion of Australian schools that were categorised as autonomous, non-autonomous and mixed-autonomous for each of the tasks is compared with the average proportions across OECD countries in Figure 5.1.

Australian principals reported higher rates of autonomy than the OECD average in tasks related to staffing and budgeting, with 89 per cent of Australian principals reporting that responsibility for appointing and hiring teachers sat with the school (compared to 70% across the OECD on average) and 96 per cent reporting that schools were responsible for budget allocations within the school (compared to 71% on average across the OECD).

Autonomy in other key areas, such as policies relating to student assessment or determining course content, was on par with or slightly lower than the OECD average. This is not unexpected given the involvement of state and territory and federal governments in the provision of education in Australia and the Foundation to Year 10 Australian Curriculum.

FIGURE 5.1 School autonomy

Results based on responses of lower secondary principals (Australia and OECD)



[1] "Autonomous status" occurs when a significant responsibility is solely taken by at least one of the following entities: principal, other members of the school management team, teachers who are not part of the school management team or the school governing board.

[2] "Non-autonomous status" occurs when a significant responsibility is solely taken by a local/regional/state/national/federal authority.

[3] "Mixed-autonomous status" occurs when a significant responsibility is taken by a local/regional/state/national/federal authority and by at least one of the following entities: principal, other members of the school management team, teachers who are not part of the school management team or the school governing board.

BOX 5.1 Comparing school autonomy in Australian primary and lower secondary schools

School autonomy in decision-making in key tasks relating to teachers' salaries (both establishing starting salaries and determining pay increases) and in the curriculum tasks of deciding which courses are offered and determining course content were more commonly reported in Australian lower secondary schools than in Australian primary schools (Table A5.1). There were no differences in autonomy related to other tasks for which comparison data was available.

5.3 Exploring autonomy and decision-making within schools

Principals were asked if they agreed that their school provided opportunities for teachers, parents (or guardians), and students to participate in school decisions. As shown in Table 5.1, there was a high level of agreement that staff were afforded opportunities to participate in decision-making, with no difference in the proportions of principals across Australia, high-performing PISA countries and the OECD and TALIS averages. Over 90 per cent of Australian principals agreed that their staff had opportunities to participate in school decisions. Opportunities for parents and guardians and students to participate in school decisions were less prevalent – over 70 per cent of Australian principals agreed with relevant statements. In Alberta (Canada) and Estonia, principals reported strong agreement (over 80%) that each of the three groups had opportunities to participate in school decisions. The situation in Japan was different, with fewer opportunities for parents and guardians (41%) and students (33%) to contribute to school decision-making.

TABLE 5.1 Participation in decision-making in schools

Results based on responses of lower secondary principals

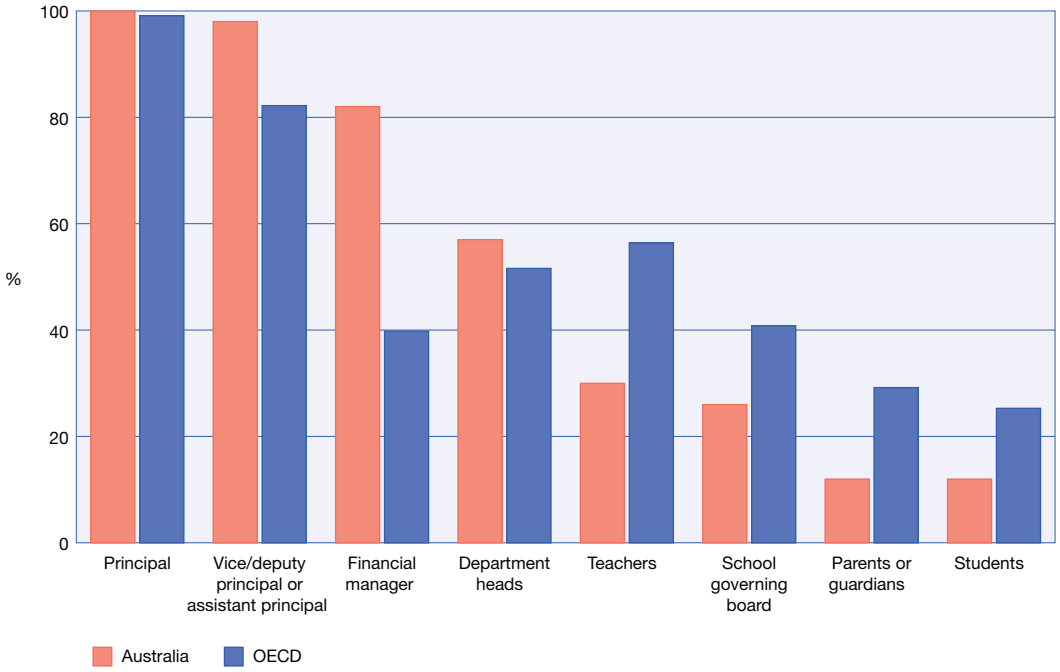
	Percentage of principals who "agree" or "strongly agree" with the following statements					
	This school provides staff with opportunities to actively participate in school decisions		This school provides parents or guardians with opportunities to actively participate in school decisions		This school provides students with opportunities to actively participate in school decisions	
	%	S.E.	%	S.E.	%	S.E.
Australia	97	1.6	73	6.6	74	6.8
OECD average-30	98	0.2	83	0.6	81	0.7
TALIS average-47	98	0.2	83	0.5	81	0.5
High-performing PISA countries						
Alberta (Canada)	100	0.0	95	2.4	92	3.2
Estonia	100	0.0	94	1.8	93	2.0
Finland	99	0.6	65	4.5	83	3.2
Japan	94	1.9	41	3.6	33	3.9
Singapore	99	0.5	54	3.6	80	2.8

Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide.

TALIS also asked principals about the composition of their school management team, where there was one. A school management team was defined as a group within the school that holds responsibility for leading and managing the school in decisions involving instruction, use of resources, curriculum, assessment and evaluation, and other strategic decisions. One hundred per cent of Australian principals reported that their school had a management team, which was higher than the average across OECD countries (87%). The composition of school management teams according to Australian principals, and principals on average across OECD countries, is presented in Figure 5.2. The principal and deputy principals were the most commonly reported members of the school management team in Australia and across the OECD on average. Over 80 per cent of Australian principals reported that their school's financial manager was on the management team, compared to 40 per cent of principals across the OECD on average. The proportions of principals across the OECD on average who reported that teachers, school governing boards, parents or guardians, and students were members of their school management teams were higher than the proportions of Australian principals who reported that these groups were represented on their management teams.

FIGURE 5.2 Composition of school management teams

Percentage of lower secondary principals who reported the following to be represented in the school management team[1, 2] (Australia and OECD)



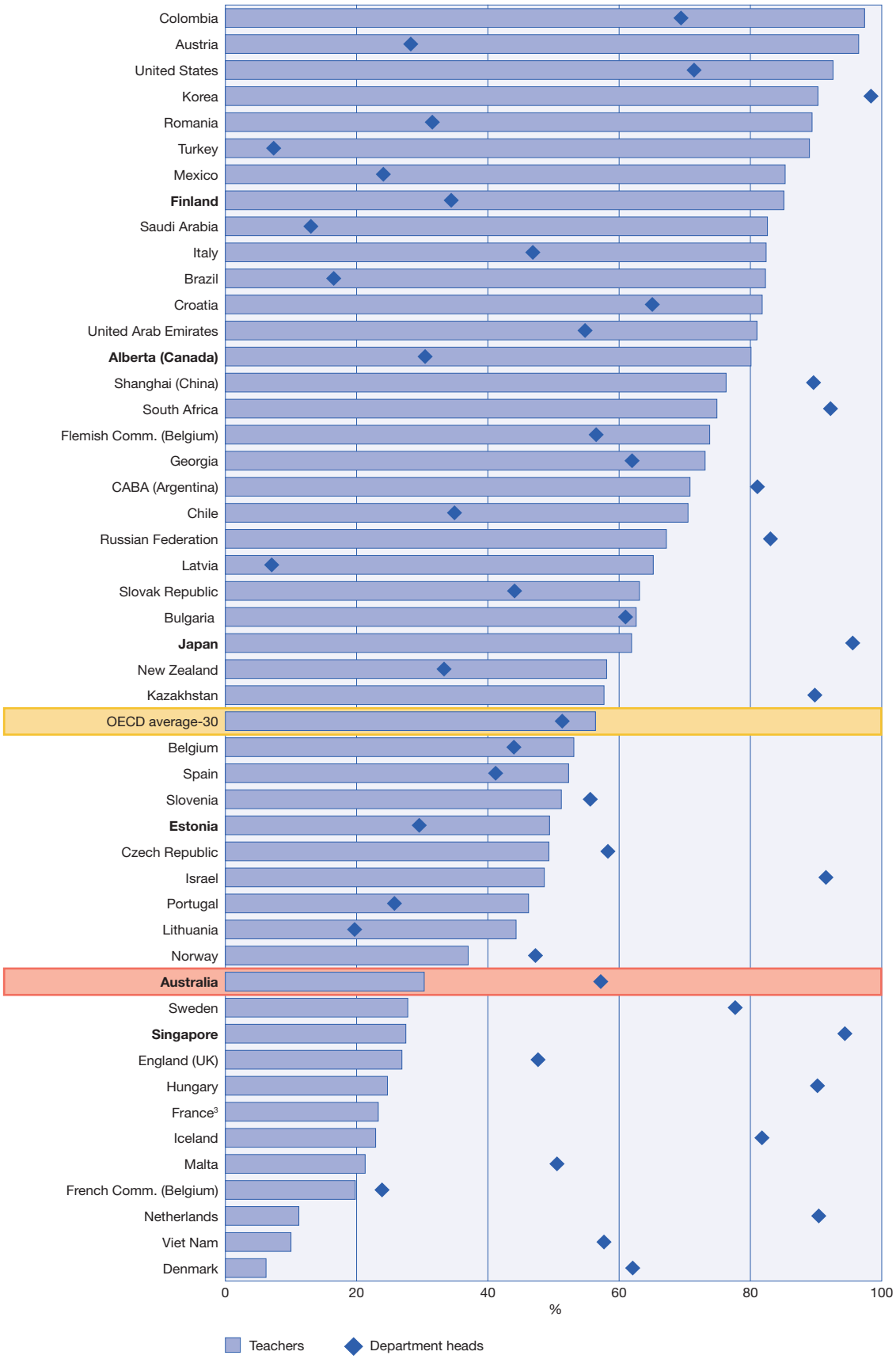
[1] "School management team" refers to a group within the school that has responsibilities for leading and managing the school in decisions such as those involving instruction, use of resources, curriculum, assessment and evaluation, and other strategic decisions related to the appropriate functioning of the school.

[2] The analysis is restricted to principals who reported having a school management team in their school.

As shown in Figure 5.2, the third most frequently reported member of the school management team across the OECD on average (at 56%) was teachers. In Australia, 30 per cent of principals reported that teachers were on their school management team. In Australian schools, departmental heads were more frequently reported to be on school management teams than teachers (57% compared to 30%). The representation of departmental heads and teachers on school management teams is presented in Figure 5.3. The variation across TALIS countries is notable, with over 90 per cent of schools in Austria, Columbia, Korea and the United States having teachers serve on their school management teams, compared to less than 10 per cent of schools in Denmark. Among high-performing PISA countries, Alberta (Canada), Estonia and Finland had higher representation of teachers than departmental heads on their school management teams, while the opposite was the case for Japan and Singapore.

FIGURE 5.3 Teacher and departmental heads representation in school management teams

Percentage of lower secondary principals who reported that teachers and department heads are represented on the school management team[1, 2]



[1] "School management team" refers to a group within the school that has responsibilities for leading and managing the school in decisions such as those involving instruction, use of resources, curriculum, assessment and evaluation, and other strategic decisions related to the appropriate functioning of the school.

[2] The analysis is restricted to principals who reported having a school management team in their school.

[3] France's values for department heads were not included, as this classification is not meaningful in the French system.

Note: High-performing PISA countries in bold. For explanation refer to Reader's Guide.

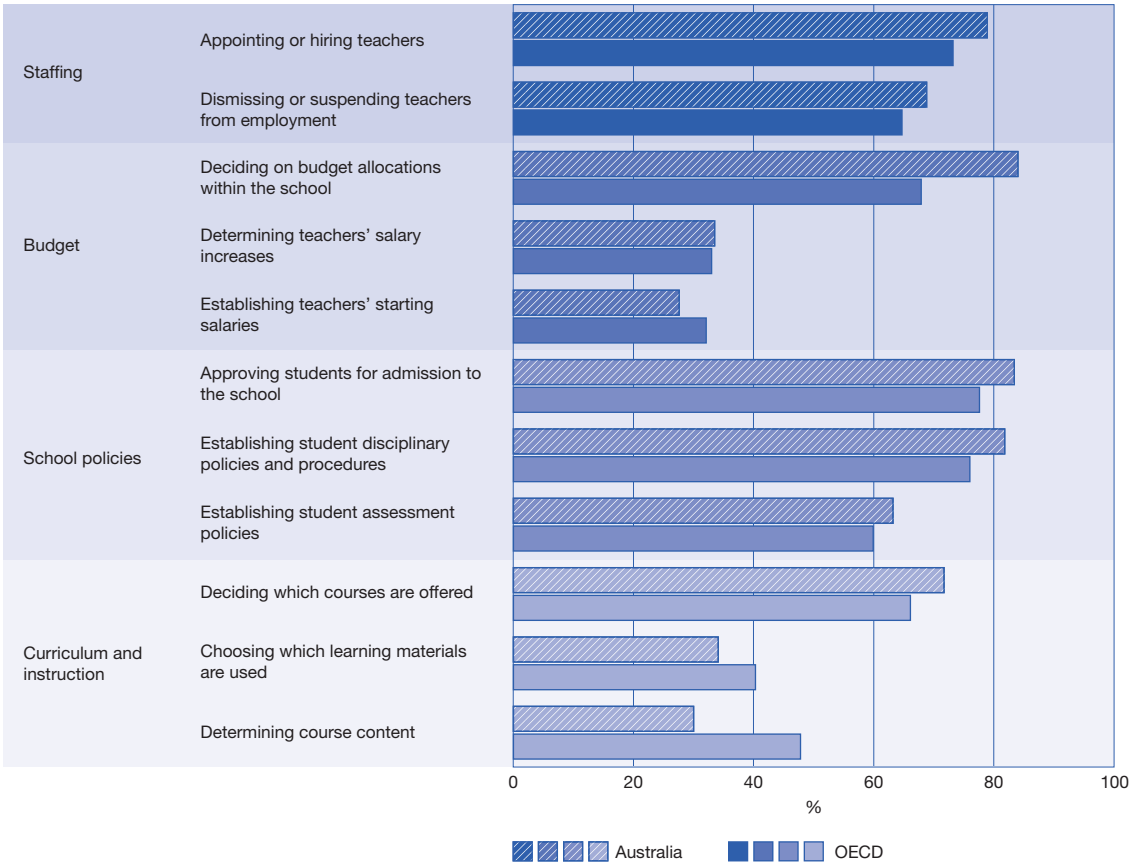
5.4 Principals' leadership

5.4.1 School responsibilities of principals

Principals were asked to report whether they personally held significant responsibility for the tasks listed at the beginning of this chapter. Higher proportions of Australian principals, compared to the average across OECD countries, reported that they held a significant responsibility for staffing (appointing or hiring teachers and dismissing or suspending teachers), school policies (establishing student disciplinary policies and procedures; approving student admissions; establishing student assessment policies), as well as decisions pertaining to budget allocations within the school and which courses would be offered (Figure 5.4).

FIGURE 5.4 Principals' responsibilities

Percentage of lower secondary principals who reported having significant responsibility for the following tasks (Australia and OECD)



While on average across OECD countries the proportion of principals who reported having responsibility for staffing issues is high (73% for appointing teachers, 65% for dismissing or suspending teachers), there were clear differences between some of the high-performing PISA countries (Table 5.2). In Estonia, 95 per cent of principals reported being responsible for appointing or hiring their teachers, in contrast to 50 per cent of principals in Singapore and only 14 per cent in Japan. Australian principals did not differ greatly from their peers in high-performing PISA countries in terms of their responsibilities for school policies. Principals in Australia and most of the comparison countries reported greater responsibility for decisions about what courses their schools offered than for choosing learning materials or determining course content.

For each country, the proportion of schools in which the principal reported being responsible for a majority of the listed tasks (at least 6 of the 11 tasks) was estimated, and is presented in Figure 5.5 as a measure of principals' overall responsibility. The overall responsibility of principals in publicly and privately managed schools is also presented for comparison. Around 65 per cent of Australian principals report holding responsibility for the majority of target tasks in their schools, which was similar to the average across the OECD. Over 90 per cent of principals in six countries, including Estonia, reported having responsibility for a majority of the targeted tasks. Less than one quarter of Japanese principals have responsibility for a majority of tasks.

In Australia and the high-performing PISA countries Estonia and Singapore, there were no significant differences in the proportions of principals of publicly and privately managed schools who held responsibility for the majority of tasks. Across the OECD on average and in Finland and Japan, proportions of principals of private schools who had responsibility for the majority of tasks were greater than the proportions of principals of public schools with similar levels of responsibility. In some cases, like Japan, these differences were over 50 percentage points.

TABLE 5.2 Responsibilities for school governance
Results based on responses of lower secondary principals

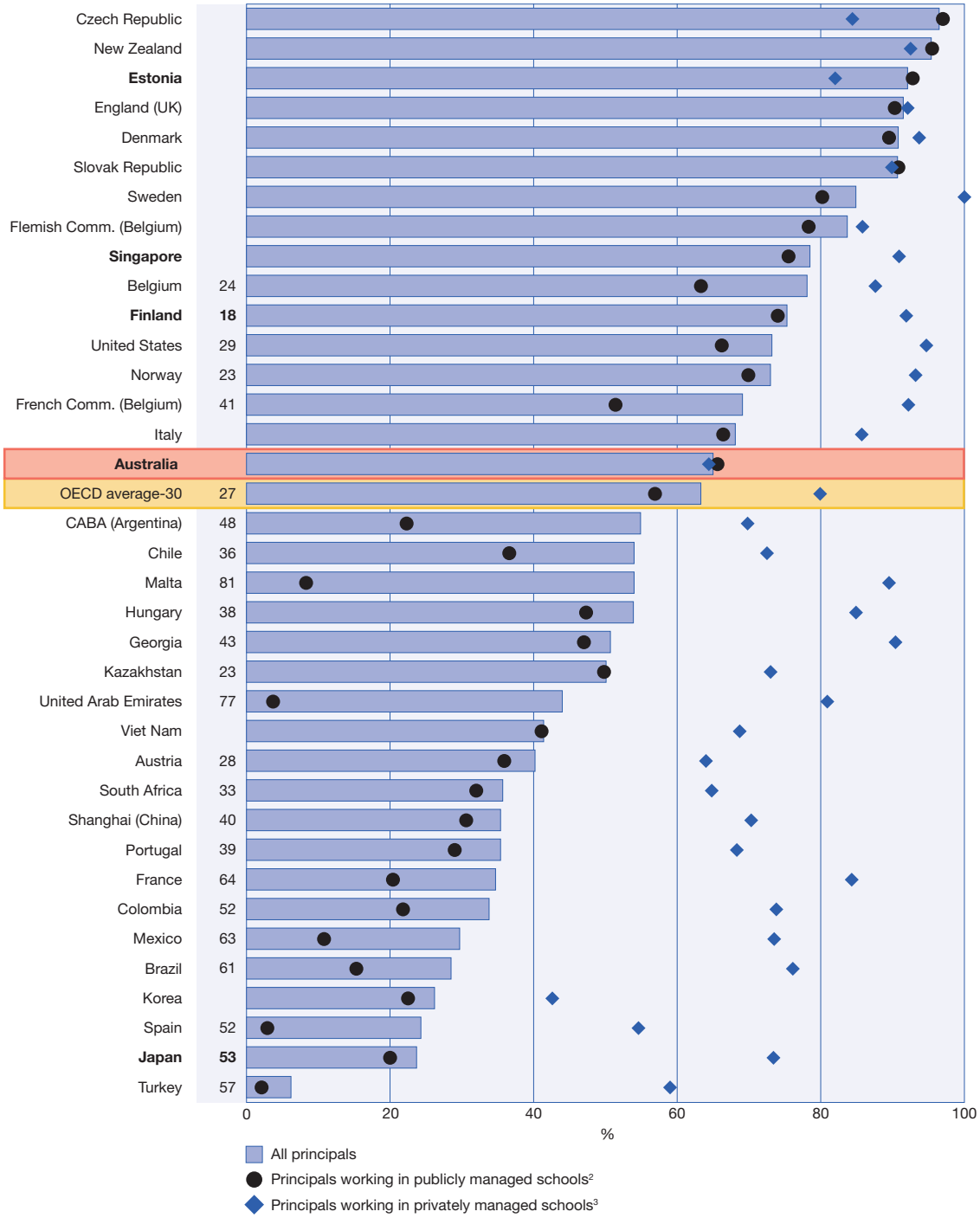
	Percentage of principals who report having a significant responsibility[1] for the following tasks											
	Appointing or hiring teachers		Dismissing or suspending teachers from employment		Establishing teachers' starting salaries[2]		Determining teachers' salary increases		Deciding on budget allocations within the school		Establishing student disciplinary policies and procedures	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia	79	4.8	69	4.9	28	4.4	33	5.1	84	5.1	82	3.5
OECD average-30	73	0.4	65	0.7	32	0.7	33	0.7	68	0.7	76	0.8
TALIS average-47	69	0.4	60	0.5	27	0.5	28	0.5	61	0.6	70	0.6
High-performing PISA countries												
Alberta (Canada)	93	2.6	60	8.1	9	4.2	9	4.4	68	10.9	78	13.0
Estonia	95	1.5	97	1.3	94	1.8	75	3.2	90	2.1	84	2.8
Finland	81	3.6	55	4.6	22	3.9	24	3.7	94	2.1	91	2.5
Japan	14	2.6	9	1.8	3	1.0	20	3.4	58	4.6	76	2.6
Singapore	50	3.0	48	3.0	18	3.1	31	4.3	95	2.7	94	2.3

	Percentage of principals who report having a significant responsibility[1] for the following tasks									
	Establishing student assessment policies[3]		Approving students for admission to the school		Choosing which learning materials are used		Determining course content[4]		Deciding which courses are offered	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia	63	4.9	83	3.0	30	4.6	34	5.1	72	6.7
OECD average-30	60	0.8	78	0.7	48	0.8	40	0.8	66	0.8
TALIS average-47	53	0.6	73	0.5	44	0.6	37	0.6	57	0.6
High-performing PISA countries										
Alberta (Canada)	58	10.7	94	2.1	55	10.4	30	5.7	78	12.9
Estonia	70	3.4	89	2.4	44	3.6	51	3.7	83	2.9
Finland	57	4.7	81	3.4	52	4.5	43	4.3	80	3.8
Japan	70	3.4	46	3.7	25	3.6	43	3.7	45	3.9
Singapore	89	2.8	89	3.1	54	3.7	54	4.0	86	2.9

[1] A significant responsibility is one where an active role is played in decision making.
[2] Including setting pay scales.
[3] Including national or regional assessments.
[4] Including national or regional curricula.
Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide

FIGURE 5.5 Principals' responsibilities, by school type

Percentage of lower secondary principals who have significant responsibility in a majority of school tasks[1]



[1] This percentage is calculated based on whether principals report having significant responsibility for at least 6 of the following 11 tasks: "Appointing or hiring teachers"; "Dismissing or suspending teachers from employment"; "Deciding on budget allocations within the school"; "Establishing teachers' starting salaries"; "Determining teachers' salary increases"; "Establishing student disciplinary policies and procedures"; "Approving students for admission to the school"; "Establishing student assessment policies"; "Choosing which learning materials are used"; "Deciding which courses are offered" and "Determining course content".

[2] A publicly managed school is a school whose principal reported that it is managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise. In the principal questionnaire, this question does not make any reference to the source of the school's funding which is reported in the preceding question.

[3] A privately managed school is a school whose principal reported that it is managed by a non-governmental organisation (e.g. a church, trade union, business or other private institution). In the principal questionnaire, this question does not make any reference to the source of the school's funding, which is reported in the preceding question. In some countries, the privately managed schools category includes schools that receive significant funding from the government (government-dependent private schools).

Notes: Statistically significant differences between publicly managed schools and privately managed schools is shown next to the country/economy name. High-performing PISA countries in bold. For explanation refer to Reader's Guide.

Differences in the level of responsibility of principals were further explored by school characteristics. As shown in Table 5.3, there were no differences in Australian principals' responsibilities associated with school location or various student populations. Across the OECD on average, high proportions of principals in metropolitan locations, principals of schools with lower concentrations of students from disadvantaged backgrounds or students with special needs reported holding responsibility for a majority of school tasks, but this pattern was not found in the high-performing PISA countries.

TABLE 5.3 Principals' overall responsibilities, by school characteristics
Results based on responses of lower secondary principals

	Number of significant responsibilities held by principals		Percentage of principals who have a significant responsibility in a majority[1] of school tasks															
			Total		By school location								By school type					
					Rural area or village (up to 3 000 people)		Town (3 001 to 100 000 people)		City (over 100 000 people)		City - Rural area		Publicly managed schools[5]		Privately managed schools[6]		Private - Public	
	Mean	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	7	0.3	65	5.8	57	24.5	56	10.0	71	7.2	14	24.9	66	7.5	64	9.1	-1	11.8
OECD average-30	6	0.0	63	0.8	60	2.1	63	1.0	66	1.5	**9**	2.7	57	1.0	80	1.8	**27**	2.1
TALIS average-47	6	0.0	56	0.6	51	1.5	54	0.9	59	1.1	**10**	2.0	48	0.7	79	1.5	**34**	1.7
High-performing PISA countries																		
Alberta (Canada)	6	0.6	67	11.8	46	23.5	70	9.9	85	4.7	39	24.1	63	12.5	c	c	c	c
Estonia	9	0.2	92	2.0	95	2.2	90	3.9	87	6.7	-8	7.1	93	2.0	82	10.4	-11	10.6
Finland	7	0.2	75	3.7	76	10.5	79	4.8	68	6.7	-8	12.3	74	3.8	92	7.8	**18**	8.5
Japan	4	0.2	24	3.1	c	c	16	3.9	28	3.9	c	c	20	3.3	73	9.6	**53**	10.2
Singapore	7	0.2	78	3.5	a	a	a	a	78	3.5	a	a	75	3.8	91	9.1	15	9.8

	Percentage of principals who have a significant responsibility in a majority[1] of school tasks																	
	By concentration of students from socioeconomically disadvantaged homes[2]						By concentration of immigrant students[3]						By concentration of students with special needs[4]					
	Less than or equal to 30% (a)		More than 30% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)	
	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	61	7.1	76	5.0	16	8.1	66	7.4	63	10.1	-3	12.7	64	7.2	67	10.9	4	13.3
OECD average-30	66	0.9	55	1.7	**-7**	2.1	63	1.0	64	1.7	0	2.3	65	0.9	60	1.6	**-6**	1.9
TALIS average-47	58	0.7	47	1.5	**-5**	1.7	56	0.7	57	1.7	0	2.0	57	0.7	58	1.5	-3	1.8
High-performing PISA countries																		
Alberta (Canada)	67	12.9	62	15.3	-5	19.7	66	15.5	69	9.0	2	17.4	61	17.1	76	7.6	15	18.9
Estonia	92	2.1	100	0.0	**8**	2.1	92	2.0	c	c	c	c	92	2.5	95	2.9	3	3.8
Finland	75	3.8	c	c	c	c	76	3.8	74	9.4	-2	9.9	78	4.3	68	7.9	-10	9.4
Japan	24	3.2	16	9.3	-8	9.6	24	3.1	c	c	c	c	24	3.3	20	10.5	-4	11.1
Singapore	78	3.6	c	c	c	c	78	4.6	79	5.2	1	6.9	80	3.4	70	12.5	-9	12.7

[1] This percentage is calculated based on whether principals report having significant responsibility in at least 6 out these 11 tasks: "Appointing or hiring teachers"; "Dismissing or suspending teachers from employment"; "Deciding on budget allocations within the school"; "Establishing teachers' starting salaries"; "Determining teachers' salary increases"; "Establishing student disciplinary policies and procedures"; "Approving students for admission to the school"; "Establishing student assessment policies"; "Choosing which learning materials are used"; "Deciding which courses are offered" and "Determining course content"

[2] "Socioeconomically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care.

[3] "Immigrant students" refers to "students who are immigrants or with a migrant background", as reported by the school principal. An "immigrant student" is one who was born outside the country. A "student with a migrant background" has parents who were both born outside the country.

[4] Students with special needs are those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged.

[5] A publicly managed school is a school whose principal reported that it is managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise. In the Principal Questionnaire, this question does not make any reference to the source of the school's funding which is reported in the preceding question.

[6] A privately managed school is a school whose principal reported that it is managed by a non-governmental organisation (e.g. a church, trade union, business or other private institution). In the Principal Questionnaire, this question does not make any reference to the source of the school's funding, which is reported in the preceding question. In some countries, the privately managed schools category includes schools that receive significant funding from the government (government-dependent private schools).

Notes: Statistically significant differences are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

BOX 5.2 Comparing principals' school responsibilities in Australian primary and lower secondary schools

Higher proportions of Australian primary school principals reported having significant responsibility for a number of school tasks compared to their counterparts in lower secondary schools (Table A5.2). Over 90 per cent of Australian primary principals were responsible for appointing or hiring teachers at their schools, compared to 79 per cent of lower secondary principals. The proportions of Australian primary principals who were responsible for school policies regarding student assessment and approving students for admission to school, along with curriculum and instructional policies (determining course content and selection of learning materials) were greater than the proportions of lower secondary principals who held responsibility for these tasks. In contrast, higher proportions of lower secondary principals, compared to primary principals, reported holding responsibility for budgetary decisions regarding teachers' salaries.

5.4.2 Types of leadership for principals

This section explores the frequency with which principals engage in actions and activities related to different types of leadership (described below), as well as their perceptions of the level of support provided by them (to others) and to them.

School leaders were asked how frequently (*never or rarely*; *sometimes*; *often*; *very often*) they engaged in the following list of activities that can be allocated to different forms of leadership:

- Providing parents or guardians with information about the school and student performance
- Collaborating with principals from other schools on challenging work tasks
- Taking actions to ensure that teachers take responsibility for improving their teaching skills
- Taking actions to ensure that teachers feel responsible for their students' learning outcomes
- Taking actions to support co-operation among teachers to develop new teaching practices
- Reviewing schools' administrative procedures and reports
- Resolving problems with the lesson timetable in the school
- Working on a professional development plan for the school
- Collaborating with teachers to solve classroom discipline problems
- Observing instruction in the classroom
- Providing feedback to teachers based on principal's observations.

The proportions of Australian principals and principals across the OECD on average who reported participating in these activities often or very often in the 12 months prior to TALIS 2018 are presented in Figure 5.6.

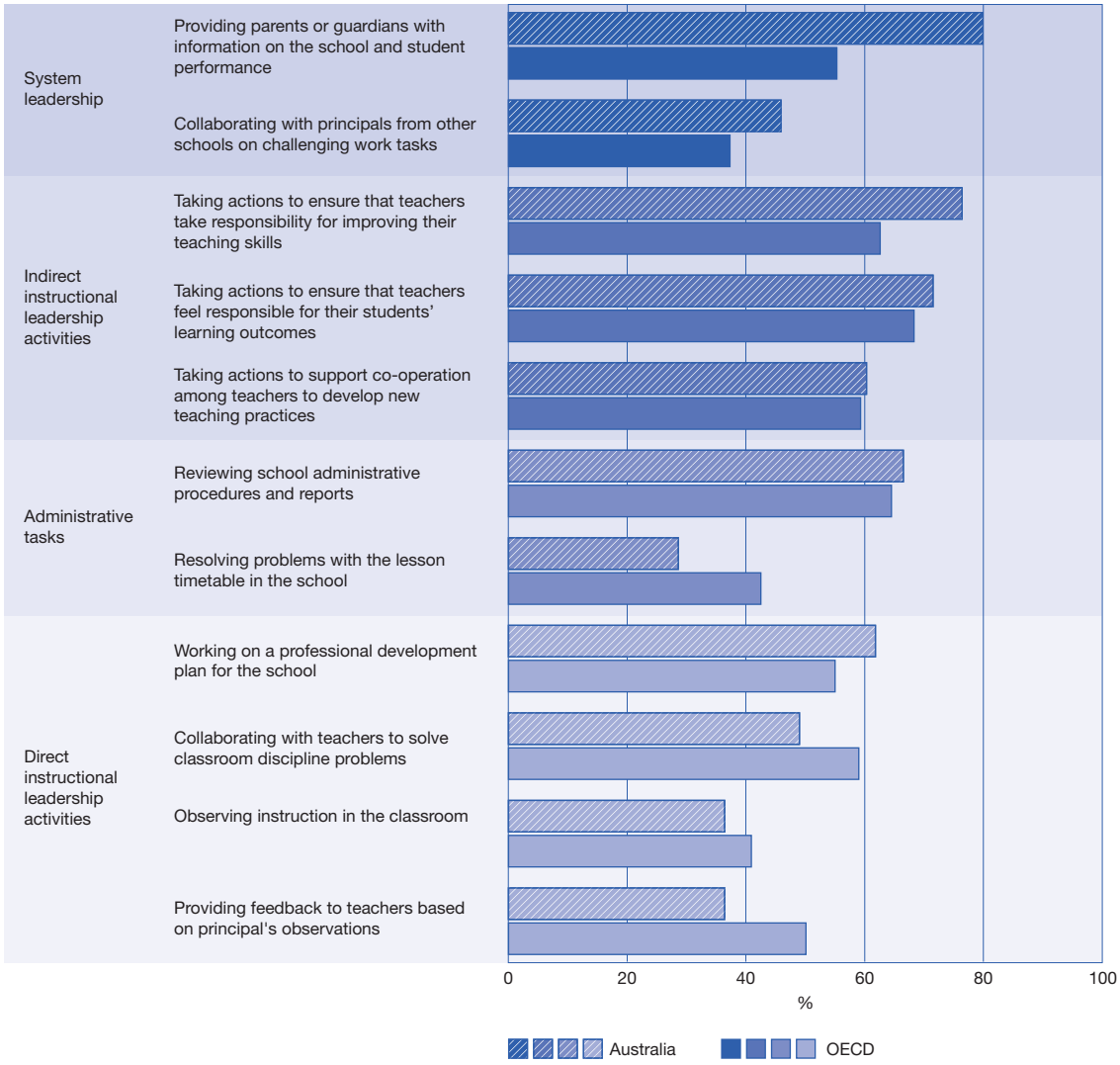
The majority (80%) of Australian principals provided information to parents or guardians about the school and student performance often or very often, which was higher than the OECD average (55%) for this activity. Australian principals' reports of participation in the other system leadership activity – collaborating with other principals on challenging work tasks – was lower at 46 per cent, and not significantly different to the OECD average of 37 per cent of principals.

Among Australian principals, the next most commonly reported leadership activities related to indirect instruction leadership - ensuring that teachers take responsibility for improving their teaching skills and ensuring that teachers feel responsible for their students' learning outcomes (76% and 71% of principals, respectively, participating in these activities often or very often).

Compared to the average of principals across OECD countries, fewer Australian principals reported spending time resolving conflicts or problems with the school's timetable or providing feedback to teachers based on the principal's observations of classroom instruction (as noted in Chapter 4 of this report, Australian teachers reported receiving feedback based on observation of their classroom by other colleagues more frequently than by their school's principal, see Table A4.3).

FIGURE 5.6 Principals' leadership activities

Percentage of low secondary principals who often *or* very often *engaged in the following activities in their school in the 12 months prior to the survey (Australia and OECD)*



BOX 5.3 Comparing Australian primary and lower secondary principals' leadership activities

Responses of Australian primary and lower secondary teachers indicated overall similarity in their participation in different leadership activities, with the single exception of collaboration with teachers to solve classroom discipline issues – a form of direct instructional leadership (Table A5.3). The majority of Australian primary principals (70%) reported participating in this activity often or very often in the 12 months prior to the TALIS 2018 survey, which was significantly higher than the corresponding proportion of Australian lower secondary principals who did so (49%).

A comparison of principals' responses to TALIS 2013 and 2018 reveals that little has changed in terms of Australian principals' participation in various leadership activities (Table 5.4), whereas among principals in the high-performing PISA countries, regular participation (often or very often) in collaboration with teachers to address classroom discipline issues has declined significantly in Finland, Japan and Singapore. In Alberta (Canada) and Singapore, principals' participation in indirect instructional leadership also declined between TALIS 2013 and 2018 – across all three items in Singapore and in ensuring teacher responsibility for improving their own teaching skills and for student performance in Alberta (Canada).

TABLE 5.4 Change in principals' leadership activities from 2013 to 2018

Results based on responses of lower secondary principals

	Percentage of principals who have "often" or "very often" engaged in the following activities in their school in the 12 months prior to the survey																	
	Collaborating with teachers to solve classroom discipline problems						Observing instruction in the classroom						Taking actions to support co-operation among teachers to develop new teaching practices					
	TALIS 2013		TALIS 2018		Change between 2013 and 2018 (TALIS 2018 - TALIS 2013)		TALIS 2013		TALIS 2018		Change between 2013 and 2018 (TALIS 2018 - TALIS 2013)		TALIS 2013		TALIS 2018		Change between 2013 and 2018 (TALIS 2018 - TALIS 2013)	
	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	35	6.4	49	5.8	14	8.6	33	6.6	36	5.8	3	8.8	64	5.6	60	6.6	-4	8.7
High-performing PISA countries																		
Alberta (Canada)	81	3.3	65	11.8	-16	12.2	76	3.1	59	10.9	-17	11.4	71	3.0	52	10.2	-19	10.7
Estonia	41	3.4	35	3.5	-6	4.9	7	1.5	15	2.2	**8**	2.7	41	3.7	45	3.5	4	5.1
Finland	70	3.7	56	3.8	**-14**	5.4	11	2.8	10	2.3	-1	3.6	57	3.8	65	4.2	8	5.7
Japan	33	4.3	19	2.8	**-14**	5.1	67	3.4	69	4.0	2	5.3	34	4.3	31	4.0	-3	5.9
Singapore	64	4.0	45	3.4	**-19**	5.3	58	4.3	51	4.2	-7	6.0	65	4.4	51	4.7	**-15**	6.5

	Percentage of principals who have "often" or "very often" engaged in the following activities in their school in the 12 months prior to the survey																	
	Taking actions to ensure that teachers take responsibility for improving their teaching skills						Taking actions to ensure that teachers feel responsible for their students' learning outcomes						Providing parents or guardians with information on the school and student performance					
	TALIS 2013		TALIS 2018		Change between 2013 and 2018 (TALIS 2018 - TALIS 2013)		TALIS 2013		TALIS 2018		Change between 2013 and 2018 (TALIS 2018 - TALIS 2013)		TALIS 2013		TALIS 2018		Change between 2013 and 2018 (TALIS 2018 - TALIS 2013)	
	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	76	5.1	76	4.6	0	6.9	82	5.2	71	5.7	-11	7.8	78	5.5	80	3.9	2	6.7
High-performing PISA countries																		
Alberta (Canada)	79	3.5	49	9.8	**-30**	10.4	85	3.1	57	10.6	**-28**	11.1	75	3.1	60	11.2	-15	11.7
Estonia	52	3.3	49	3.6	-3	4.9	53	3.5	53	3.6	0	5.0	43	3.7	41	3.4	-1	5.1
Finland	40	3.6	49	4.4	9	5.7	44	4.4	34	3.5	-10	5.6	25	3.2	17	3.0	-8	4.4
Japan	39	4.0	45	4.3	6	5.9	33	3.5	30	3.8	-3	5.2	51	3.5	42	3.7	-9	5.1
Singapore	84	3.0	74	4.4	**-10**	5.3	91	2.5	81	4.2	**-10**	4.9	68	4.0	56	4.3	**-12**	5.9

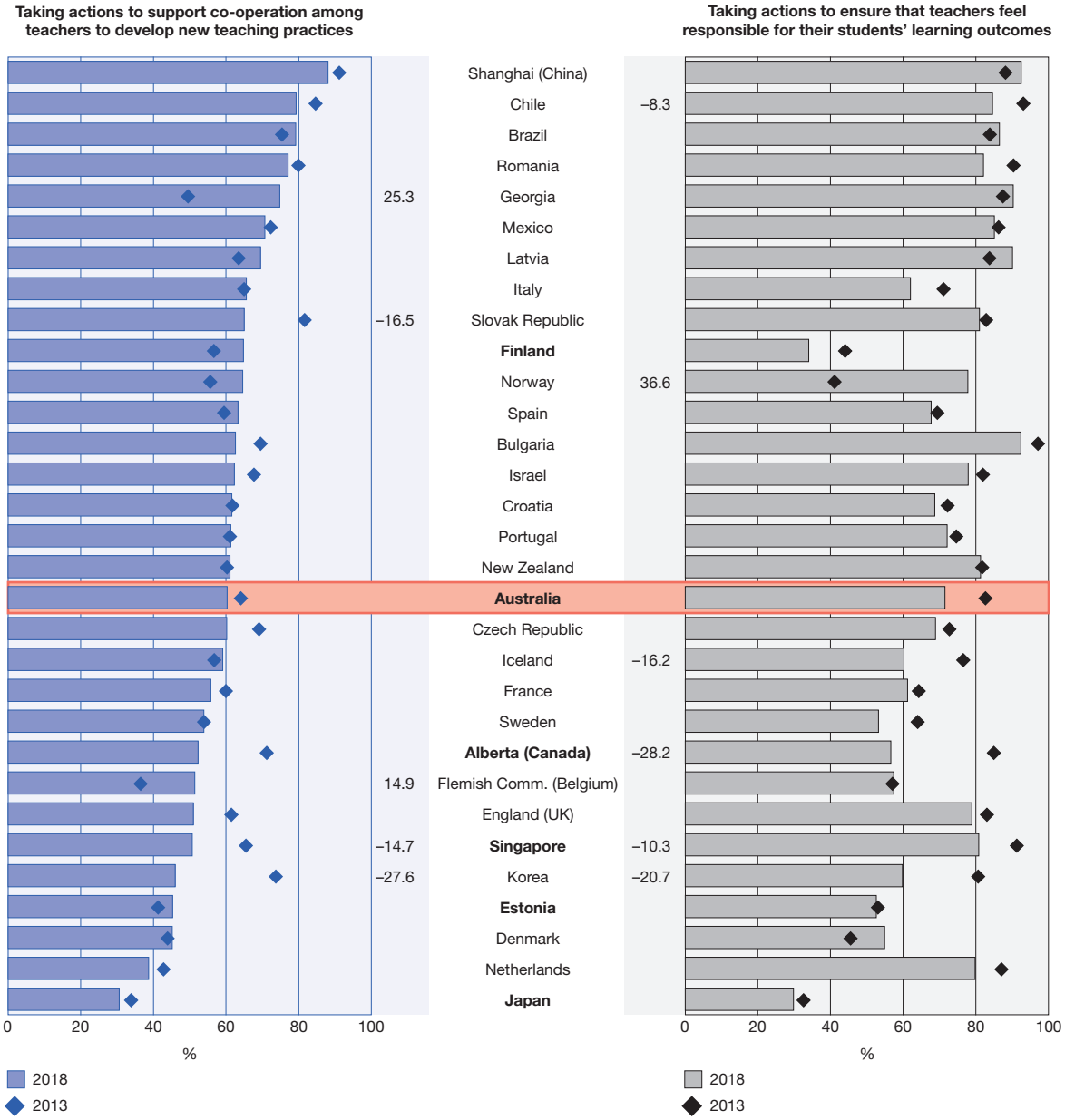
	Percentage of principals who have "often" or "very often" engaged in the following activities in their school in the 12 months prior to the survey					
	Resolving problems with the lesson timetable in this school					
	TALIS 2013		TALIS 2018		Change between 2013 and 2018 (TALIS 2018 - TALIS 2013)	
	%	S.E.	%	S.E.	% dif.	S.E.
Australia	26	6.0	29	5.7	3	8.3
High-performing PISA countries						
Alberta (Canada)	42	4.0	33	6.5	-10	7.6
Estonia	19	2.8	25	3.0	6	4.1
Finland	75	3.4	76	3.5	1	4.9
Japan	9	2.6	8	2.0	-1	3.3
Singapore	33	4.4	31	4.3	-2	6.2

Notes: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

This decline in instructional leadership activities was also apparent in other TALIS countries, as illustrated in Figure 5.7, but not among Australian principals.

FIGURE 5.7 Change in principals' instructional leadership from 2013 to 2018

Percentage of lower secondary principals who reported to have often *or* very often *engaged in the following activities in their school in the 12 months prior to the survey*

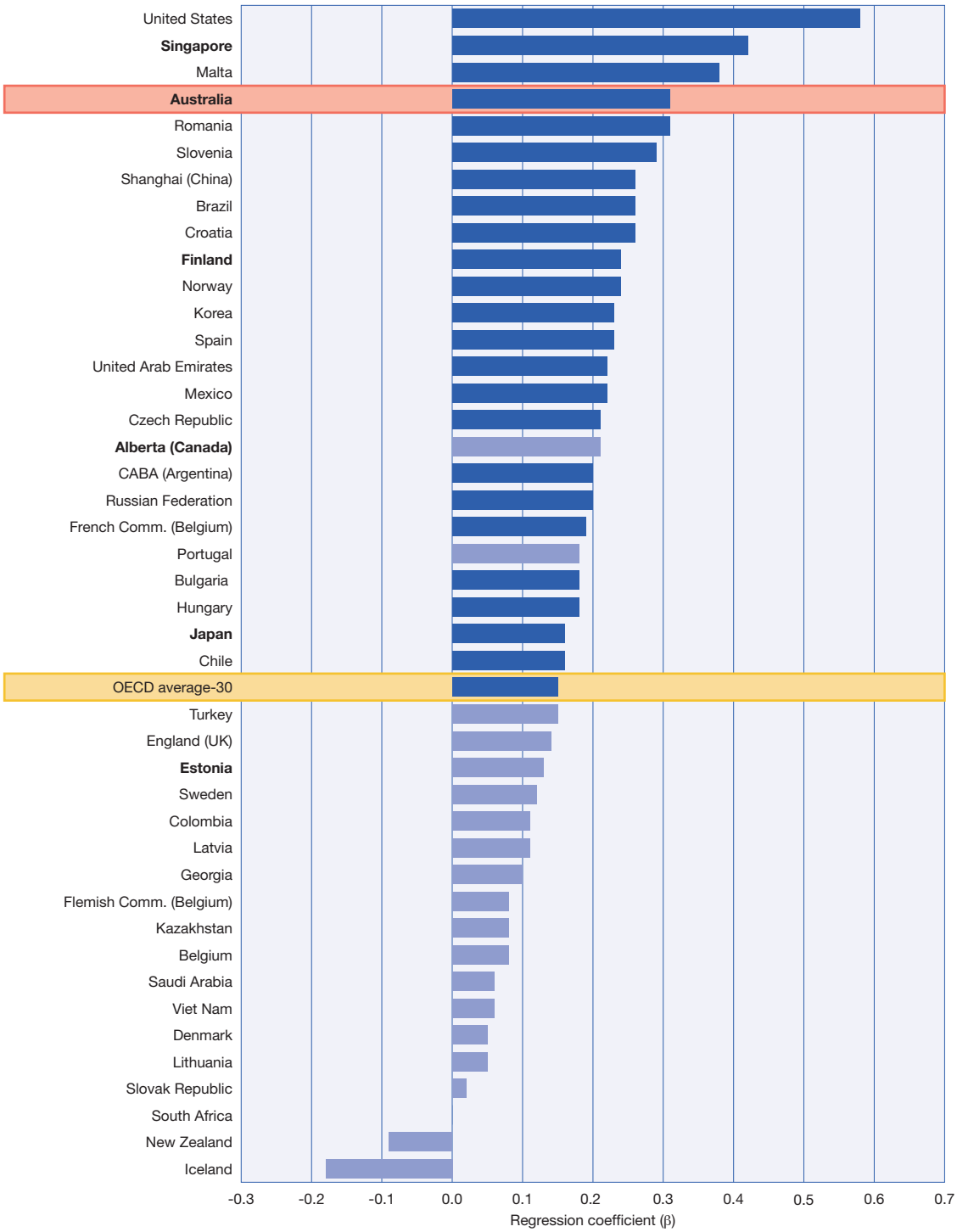


Notes: Only countries and economies with available data for 2013 and 2018 are shown. Statistically significant changes between 2013 and 2018 (TALIS 2018 - TALIS 2013) are found next to the category and the country/economy name. High-performing PISA countries shown in bold. For explanation refer to Reader's Guide.

The relationship between principals' instructional leadership (both direct and indirect) and other forms of leadership, such as distributed leadership (measured by principals' reports of the level of involvement of other stakeholders in school decisions) was explored using regression analyses. As shown in Figure 5.8, Australian principals had the fourth strongest positive association between the index of instructional leadership and the participation of stakeholders index. On average across the OECD, and in 24 of the participating TALIS countries, principals who are able to involve staff, parents and students in their school decisions also tend to report having high levels of collaboration (between staff and the principal) and that they ensure that their teachers feel responsible for their own and students' learning.

FIGURE 5.8 Relationship between principals' instructional leadership and participation among stakeholders in the school

Change in the index of instructional leadership associated with the index of participation among stakeholders[1, 2, 3]



[1] Results of linear regression based on responses of lower secondary principals.

[2] The index of instructional leadership is measured by principals reporting they take action to ensure that teachers feel responsible for their students' learning outcomes, take responsibility for improving their teaching skills and co-operate to develop new teaching practices. The index of participation among stakeholders is measured by whether the school provides staff, parents/guardians and students with the opportunity to actively participate in school decisions, whether there is a culture of shared responsibility in the school and whether there is a collaborative school culture characterised by mutual support.

[3] Controlling for the following: principal characteristics (gender, age, years of experience as a principal at current school), school characteristics (school location index, school type and school size), average number of school tasks for which principals report having significant responsibility, the proportion of time spent on instructional leadership, the proportion of time spent on curriculum and teaching-related tasks, the perception of time needed for instructional leadership and having received training in instructional leadership.

Note: Statistically significant coefficients are marked in a darker tone. High-performing PISA countries shown in bold. For explanation refer to Reader's Guide.

5.4.3 Exploring system leadership: parents and communities

System leadership addresses initiatives aimed at strengthening links between schools and their communities, especially with principals from other schools. In many systems, principals are increasingly encouraged to exercise leadership not only within their school, but also beyond their school. As indicated in Figure 5.6, Australian principals reported a higher level of participation in one form of system leadership (providing information to parents and guardians about the school and student performance) compared to the average across the OECD.

School leaders were asked to indicate whether the following statements regarding schools' engagement with the community applied to their school (*not at all*; *somewhat*; *quite a bit*; *a lot*):

- Parents or guardians support student achievement
- Parents or guardians are involved in school activities
- The school co-operates with the local community.

The proportions of Australian principals who reported that these statements applied to their schools quite a bit or a lot are presented in Table 5.5, along with the OECD and TALIS averages and the proportions of principals in high-performing PISA countries who agreed with these statements.

Australian principals reported greater support for student achievement among their schools' parents and guardians than on average across the OECD, with 77 per cent reporting that this applied to their school quite a bit or a lot compared to 62 per cent for the OECD on average. Support for student achievement was even higher among Singaporean parents and guardians. Fewer Australian principals indicated that parents and guardians were involved in school activities, however, with only 36 per cent endorsing this statement compared to 48 per cent on average across OECD countries and 60 per cent of Japanese principals. There was not a great deal of difference in the level of co-operation with the local community reported by Australian principals and those in comparison countries, apart from Finland.

TABLE 5.5 School-community engagement
Results based on responses of lower secondary principals

	Percentage of principals who report that the following applies to their school "quite a bit" or "a lot"							
	Parents or guardians support student achievement		Parents or guardians are involved in school activities		Students have a desire to do well in school		The school co-operates with the local community	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia	77	3.8	36	5.0	75	6.1	76	5.8
OECD average-30	62	0.9	48	0.9	82	0.6	72	0.7
TALIS average-47	62	0.7	47	0.7	80	0.5	73	0.6
High-performing PISA countries								
Alberta (Canada)	66	11.9	48	8.7	89	3.2	82	5.4
Estonia	63	3.7	45	3.6	89	2.2	76	3.1
Finland	65	3.7	27	3.9	85	3.0	55	4.3
Japan	56	3.7	60	4.1	78	3.4	64	4.2
Singapore	87	2.2	47	3.7	92	2.0	68	4.9

Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide.

Principals' reports of parent and guardian involvement in school activities was also found to vary with schools' characteristics, as shown in Table 5.6. There were no differences in parental involvement between rural and metropolitan schools, but significant differences were found between publicly managed and privately managed schools in Australia and Singapore, as well as across the OECD and TALIS countries on average. Australian principals who were working in schools with lower concentrations of students from socioeconomically disadvantaged backgrounds (30% of the student population or less) also reported higher levels of parent and guardian involvement than principals

in schools with higher proportions of students from disadvantaged homes. This difference held across OECD and TALIS countries, on average, but was not significant in any of the high-performing PISA countries.

TABLE 5.6 Involvement of parents or guardians in school activities, by school characteristics
Results based on responses of lower secondary principals

	Percentage of principals who report that involvement of parents or guardians in school activities applies to their school "quite a bit" or "a lot"															
			By school location								By school type					
	Total		Rural area or village (up to 3 000 people)		Town (3 001 to 100 000 people)		City (over 100 000 people)		City - Rural area		Publicly managed schools[4]		Privately managed schools[5]		Private - Public	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	36	5.0	26	16.2	16	7.7	48	6.3	23	18.1	25	4.3	48	8.6	**23**	9.6
OECD average-30	48	0.9	45	2.1	49	1.2	50	1.5	3	2.7	46	1.0	61	2.3	**17**	2.5
TALIS average-47	47	0.7	45	1.6	49	1.0	50	1.2	4	2.1	44	0.8	60	1.8	**16**	2.1
High-performing PISA countries																
Alberta (Canada)	48	8.7	30	14.9	66	8.8	55	8.9	25	18.0	44	8.5	c	c	c	c
Estonia	45	3.6	43	4.6	51	6.9	40	7.7	-3	9.0	45	3.7	56	14.9	11	15.4
Finland	27	3.9	21	9.0	27	5.1	34	8.2	13	12.3	25	4.2	57	16.4	32	17.4
Japan	60	4.1	c	c	55	8.3	62	4.6	c	c	59	4.3	72	12.7	13	13.3
Singapore	47	3.7	a	a	a	a	47	3.7	a	a	39	4.0	80	10.7	**41**	11.5

	Percentage of principals who report that involvement of parents or guardians in school activities applies to their school "quite a bit" or "a lot"															
	By concentration of students from socioeconomically disadvantaged homes[1]						By concentration of immigrant students[2]						By concentration of students with special needs[3]					
	Less than or equal to 30% (a)		More than 30% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)	
	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	44	6.7	15	5.7	**-29**	9.3	32	5.9	42	9.5	10	11.8	38	6.1	33	11.1	-5	13.5
OECD average-30	52	1.0	37	2.1	**-20**	2.4	49	0.9	42	2.3	**-8**	2.6	50	1.0	44	1.6	**-6**	2.0
TALIS average-47	51	0.8	36	1.6	**-19**	1.9	49	0.7	39	2.0	**-10**	2.2	49	0.8	43	1.6	**-6**	1.8
High-performing PISA countries																		
Alberta (Canada)	50	9.6	30	15.1	-19	18.0	43	10.5	62	8.0	19	13.4	42	11.3	58	7.8	16	13.6
Estonia	46	3.7	31	10.4	-16	10.7	45	3.6	c	c	c	c	45	4.2	46	6.7	1	7.9
Finland	28	3.9	c	c	c	c	27	4.1	32	10.4	6	10.8	28	4.3	27	7.2	0	8.0
Japan	58	4.3	73	12.8	15	13.2	60	4.2	c	c	c	c	62	4.4	39	13.3	-23	14.2
Singapore	48	3.7	c	c	c	c	43	5.5	53	6.0	11	8.8	46	4.2	51	13.8	5	15.5

[1] "Socioeconomically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care.

[2] "Immigrant students" refers to "students who are immigrants or with a migrant background", as reported by the school principal. An "immigrant student" is one who was born outside the country. A "student with a migrant background" has parents who were both born outside the country.

[3] Students with special needs are those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged.

[4] A publicly managed school is a school whose principal reported that it is managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise. In the Principal Questionnaire, this question does not make any reference to the source of the school's funding which is reported in the preceding question.

[5] A privately managed school is a school whose principal reported that it is managed by a non-governmental organisation (e.g. a church, trade union, business or other private institution). In the Principal Questionnaire, this question does not make any reference to the source of the school's funding, which is reported in the preceding question. In some countries, the privately managed schools category includes schools that receive significant funding from the government (government-dependent private schools).

Notes: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

BOX 5.4 Comparing Australian primary and lower secondary schools' community engagement

As shown in Table A5.4, Australian primary and lower secondary principals reported similarly high levels of parent and guardian support for student achievement in their schools – over 70 per cent of principals in both primary and lower secondary schools indicated that there was quite a bit or lot of support from parents in this area. There were also similar levels of co-operation with local communities in primary and lower secondary schools.

Where primary and lower secondary principals' reports differed significantly, however, was in the level of parent and guardian involvement in school activities – 36 per cent of Australian lower secondary principals indicated that this applied to their school quite a bit or a lot, compared to 56 per cent of Australian primary school principals. This is not unexpected – many Australian primary schools encourage parents to become involved in classroom activities (such as assisting with reading in the early grades) and volunteer activities (such as canteen duty or assisting with school excursions). As students become older and more independent, parents or guardians are less involved with these elements of schooling.

5.4.4 Principals' perceptions of support and relations with policy-makers

Given the variety of responsibilities held by school principals and the involvement of multiple stakeholders in schools, as reported in previous sections of this chapter, it is also important to consider how supported principals feel in their roles and how they perceive their relationships with policy-making. Principals were asked to indicate their level of agreement (*strongly disagree*; *disagree*; *agree*; *strongly agree*) with the following statements:

- I am satisfied with the support that I received from staff in this school
- I need more support from authorities (local, regional, state, or national authorities)
- I cannot influence decisions that are important for my work.

The proportions of Australian principals who agreed (strongly agree or agree) with each of these statements is presented in Table 5.7, alongside the corresponding proportions for the OECD and TALIS averages and high-performing PISA countries for comparison.

Satisfaction with the level of support provided by school staff was uniformly high among this selection of principals (Table 5.7). Satisfaction with support from external authorities, however, varied greatly. Only 45 per cent of Australian principals agreed that they needed more support from external authorities, which was lower than the average across OECD countries (66%) and substantially lower than the 96 per cent of Japanese principals who agreed with this statement. Australian principals' agreement with the statement regarding not being able to influence key work-related decisions was also lower than on average across OECD and TALIS countries, and compared to principals in Finland, but not different to responses from principals in other high-performing PISA countries.

TABLE 5.7 Principals' support

Results based on responses of lower secondary principals

	Percentage of principals who "agree" or "strongly agree" with the following statements					
	I am satisfied with the support that I receive from the staff in this school		I need more support from authorities[1]		I cannot influence decisions that are important for my work	
	%	S.E.	%	S.E.	%	S.E.
Australia	94	4.3	45	6.2	15	3.1
OECD average-30	91	0.5	66	0.9	33	0.8
TALIS average-47	92	0.4	71	0.6	34	0.6
High-performing PISA countries						
Alberta (Canada)	90	3.7	50	10.2	20	4.7
Estonia	93	2.0	49	3.5	21	2.9
Finland	88	3.0	45	4.4	32	4.1
Japan	87	2.9	96	1.3	12	2.5
Singapore	98	1.8	40	3.3	11	3.6

[1] Municipal, local, regional, state, or national authorities.

Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide.

BOX 5.5 Comparing Australian primary and lower secondary principals' perceptions of support

Australian primary and lower secondary principals were similarly satisfied with the level of support they received from their staff, with over 90 per cent agreeing with this statement (Table A5.5). Their perceptions of support from external authorities and degree of influence over decisions important for their work indicated some differences in the experiences of primary and lower secondary principals in Australian schools. Over 60 per cent of Australian primary principals indicated that they needed more support from external authorities (including local, regional, state or national authorities), which was significantly higher than the 45 per cent of lower secondary principals who agreed with this statement. Similarly, the proportion of Australian primary principals who indicated that they were unable to influence decisions that were important for their work was greater than the proportion of Australian lower secondary principals who felt this way. These findings, combined with those as reported in Boxes 5.1 and 5.2, suggest that Australian primary principals may be feeling a sense of overload and lack of autonomy or influence in decision-making, as well as a lack of support from external authorities that is not being experienced to the same extent by their colleagues in secondary schools.

5.5 Teacher leadership

Following on from the previous sections, in which the focus was on the leadership activities and styles of principals, this section focuses on the responsibilities and leadership activities that teachers undertake in schools. First, teachers' levels of responsibility for several school tasks, as reported by their principals, are examined, followed by discussion of teachers' feelings about their control of curriculum issues that impact on their target classes and principals' perceptions of teachers' academic and curriculum leadership. The section concludes with an examination of teachers' perceptions of their relationships with policy-makers and the media, as indicators of teachers' leadership activities in the wider community.

5.5.1 School responsibilities of teachers

Principals were asked to indicate the level of responsibility teachers in their schools held for a set of eleven different tasks. These tasks were divided into four groups:

- Staffing (appointing and hiring teachers; dismissing or suspending teachers)
- Budget (deciding budget allocations within the school; establishing teachers starting salaries; determining teachers' salary increases)
- School policies (establishing student disciplinary policies and procedures; approving student admissions; establishing student assessment policies)
- Curriculum and instructional policies (choosing learning material; deciding which courses are offered; determining course content).

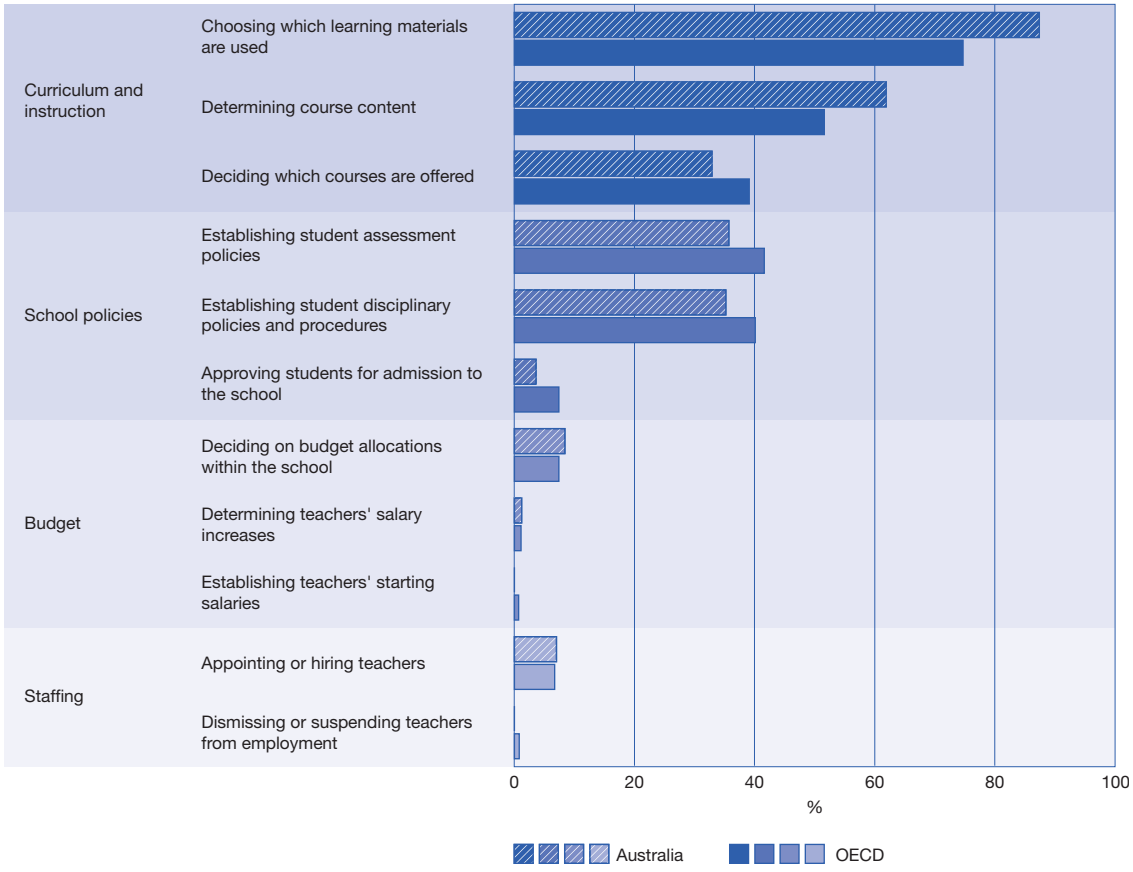
The proportions of Australian teachers who hold responsibility for each of these tasks, according to their principals, are presented in Figure 5.9 along with the average proportions of teachers who hold similar responsibilities across OECD countries on average.

It is immediately apparent that, according to the reports of principals, Australian teachers and those across the OECD on average, hold low levels of responsibility for issues concerning staffing and budgeting. Less than 10 per cent of Australian teachers held responsibility for budget allocations within the school or for appointing or hiring teachers, similar proportions to the OECD averages. Fewer Australian teachers were responsible for decisions regarding staff salaries or dismissals compared to the OECD average, although the averages across the OECD were already quite low.

The key area of responsibility for teachers in Australia, and across the OECD on average, was curriculum and instructional responsibilities, particularly choosing which learning material is used (87% of Australian principals and 75% of principals on average across the OECD indicated that this was the responsibility of teachers in their schools). Over 60 per cent of Australian principals reported that teachers in their schools were responsible for determining course content, which was higher than the corresponding proportion across the OECD on average (52%).

FIGURE 5.9 Teachers' school responsibilities

Percentage of lower secondary principals who reported that teachers have significant responsibility for the following tasks (Australia and OECD)

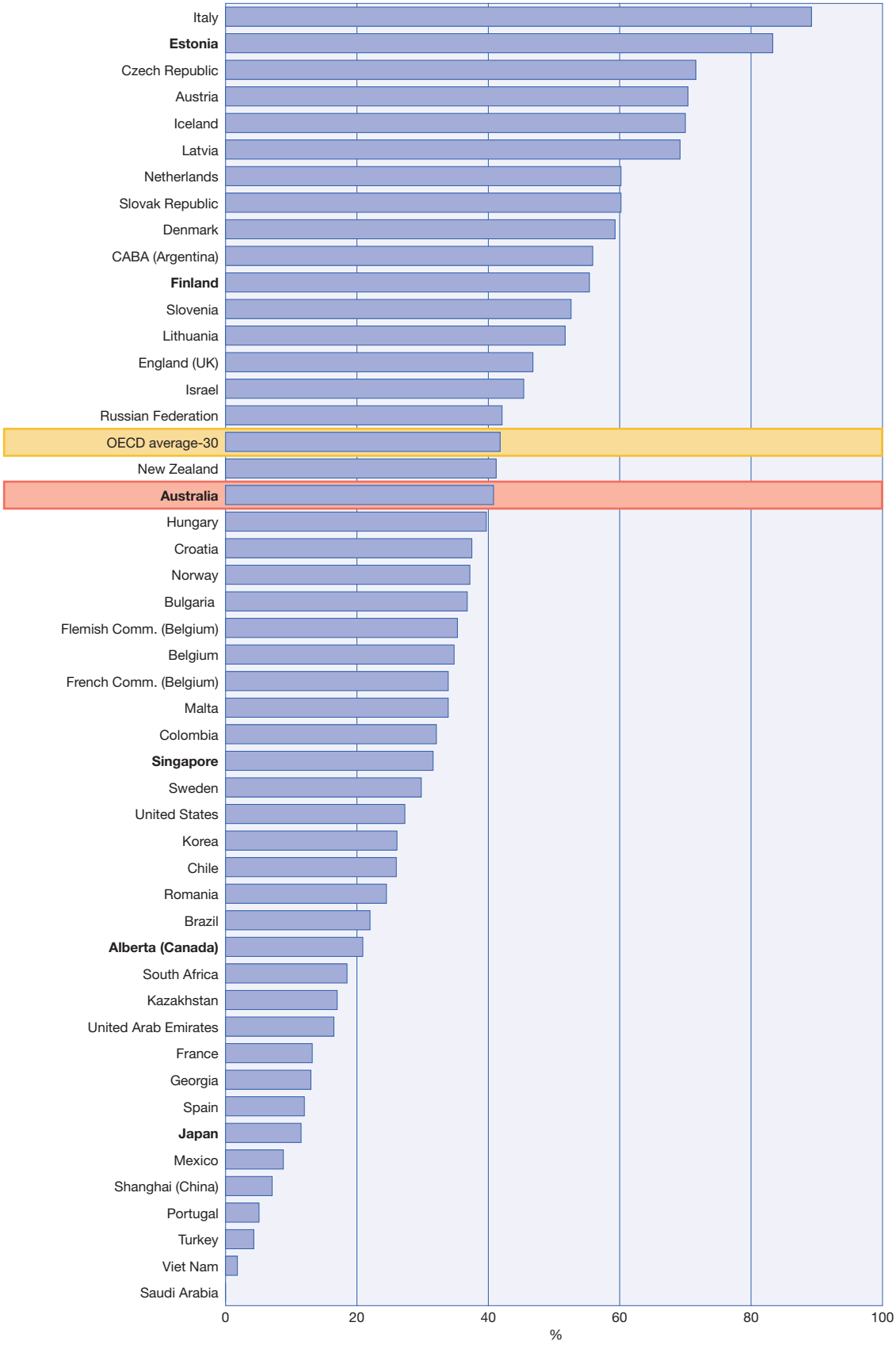


To explore teachers' responsibilities for school tasks, an index was created using the items focused on school and curriculum and instructional policies. Where principals reported that teachers in their schools held responsibility for four of the six tasks, teachers in those schools were categorised as having responsibility of a majority of tasks related to school policies and curriculum and instruction. Figure 5.10 presents the proportions of schools in which teachers hold responsibility in these key areas. The proportion of Australian teachers with responsibility for a majority of school policy and curriculum and instruction tasks was 41 per cent, similar to the OECD average of 42 per cent.

The proportions across the high-performing PISA countries ranged from 83 per cent of teachers in Estonia holding responsibility for a majority of these tasks, to 11 per cent in Japan.

FIGURE 5.10 Overall teachers' responsibilities for school policies, curriculum and instruction

Percentage of lower secondary principals who reported that teachers have significant responsibility in a majority of tasks related to school policies, curriculum and instruction[1]



[1] This percentage is calculated based on whether principals reported that teachers have significant responsibility in at least four of the following six tasks: "Establishing student disciplinary policies and procedures"; "Approving students for admission to the school"; "Establishing student assessment policies"; "Choosing which learning materials are used"; "Deciding which courses are offered" and "Determining course content".

Note: High-performing PISA countries in bold. For explanation refer to Reader's Guide.

There were no differences in Australian teachers' levels of responsibility associated with school characteristics, as shown in Table 5.8. In contrast, across the OECD on average, teachers in private schools, and schools with lower concentrations of students from socioeconomically disadvantaged backgrounds held greater responsibility for school policies, curriculum and instruction, according to their principals.

TABLE 5.8 Teachers' overall responsibilities for school policies, curriculum and instruction, by school characteristics

Results based on responses of lower secondary principals

	Number of significant responsibilities held by teachers		Percentage of principals who report that teachers have a significant responsibility in a majority[1] of tasks related with school policies, curriculum and instruction															
			Total		By school location								By school type					
					Rural area or village (up to 3 000 people)		Town (3 001 to 100 000 people)		City (over 100 000 people)		City - Rural area		Publicly managed schools[5]		Privately managed schools[6]		Private - Public	
	Mean	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	3	0.1	41	5.8	c	c	38	12.1	42	7.4	c	c	52	6.7	31	8.7	-21	10.8
OECD average-30	3	0.0	42	0.9	47	2.1	41	1.1	42	1.5	1	2.9	39	0.9	46	2.5	**10**	2.7
TALIS average-47	2	0.0	36	0.7	36	1.6	35	0.9	37	1.1	4	2.1	32	0.7	43	1.9	**14**	2.1
High-performing PISA countries																		
Alberta (Canada)	2	0.2	21	6.3	21	12.9	16	6.8	23	6.9	2	13.5	17	4.9	c	c	c	c
Estonia	4	0.1	83	2.7	84	3.8	83	4.9	80	7.6	-4	8.6	83	2.8	91	9.8	8	10.2
Finland	3	0.1	55	5.0	55	13.2	58	6.7	50	8.4	-5	15.7	54	5.2	77	14.1	24	15.1
Japan	1	0.1	11	2.6	c	c	9	4.2	14	3.3	c	c	12	2.8	7	5.4	-4	6.1
Singapore	2	0.1	32	4.2	a	a	a	a	32	4.2	a	a	24	3.5	c	c	c	c

	Percentage of principals who report that teachers have a significant responsibility in a majority[1] of tasks related with school policies, curriculum and instruction																	
	By concentration of students from socioeconomically disadvantaged homes[2]						By concentration of immigrant students[3]						By concentration of students with special needs[4]					
	Less than or equal to 30% (a)		More than 30% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)	
	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	39	8.2	45	10.8	6	15.2	45	8.2	34	7.7	-11	11.4	43	8.2	37	10.9	-6	14.8
OECD average-30	43	1.0	32	2.0	**-5**	2.4	43	1.0	38	2.2	-3	2.6	42	1.0	40	1.6	-4	2.0
TALIS average-47	36	0.8	28	1.5	**-4**	1.8	36	0.7	35	1.7	-1	2.0	35	0.8	39	1.6	-2	1.9
High-performing PISA countries																		
Alberta (Canada)	22	7.0	10	8.1	-12	10.5	22	8.1	18	6.4	-4	9.6	15	6.4	33	10.3	18	12.0
Estonia	83	2.9	92	7.5	10	7.9	84	2.7	c	c	c	c	82	3.6	86	4.8	4	6.2
Finland	55	5.1	c	c	c	c	56	5.2	50	13.7	-6	14.2	55	6.3	55	9.0	0	11.2
Japan	13	2.9	0	0.0	**-13**	2.9	11	2.7	c	c	c	c	12	2.8	8	5.9	-4	6.4
Singapore	33	4.4	c	c	c	c	26	5.2	40	7.9	14	10.1	31	4.1	38	13.3	7	13.3

[1] This percentage is calculated based whether principals report teachers having a significant responsibility in at least 4 out these 6 tasks: "Establishing student disciplinary policies and procedures"; "Approving students for admission to the school"; "Establishing student assessment policies"; "Choosing which learning materials are used"; "Deciding which courses are offered" and "Determining course content".

[2] "Socioeconomically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care.

[3] "Immigrant students" refers to "students who are immigrants or with a migrant background", as reported by the school principal. An "immigrant student" is one who was born outside the country. A "student with a migrant background" has parents who were both born outside the country.

[4] Students with special needs are those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged.

[5] A publicly managed school is a school whose principal reported that it is managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise. In the Principal Questionnaire, this question does not make any reference to the source of the school's funding which is reported in the preceding question.

[6] A privately managed school is a school whose principal reported that it is managed by a non-governmental organisation (e.g. a church, trade union, business or other private institution). In the Principal Questionnaire, this question does not make any reference to the source of the school's funding, which is reported in the preceding question. In some countries, the privately managed schools category includes schools that receive significant funding from the government (government-dependent private schools).

Notes: Statistically significant differences are indicated in bold. For explanation of selection of high-performing PISA countries refer to Reader's Guide.

BOX 5.6 Comparing Australian primary and lower secondary teachers' school responsibilities

Australian teachers, both in primary and lower secondary schools, had similarly low levels of responsibility for budgeting issues (Table A5.6). A higher proportion of primary teachers than lower secondary teachers, according to principals' reports, had responsibility for appointing or hiring teachers in their schools. The proportion of teachers with responsibility for establishing policies and procedures around student discipline was also greater in Australian primary schools than in lower secondary schools – 49 per cent compared to 35 per cent.

Higher proportions of lower secondary teachers had responsibility for instructional and curriculum matters, such as course content and selecting learning material, compared to teachers in Australian primary schools (course content: 62% of secondary teachers and 48% of primary teachers; selecting learning material: 87% of secondary teachers and 76% of primary teachers). However, it should be noted that the proportion of principals in Australian primary schools who had responsibility for these tasks was greater than the proportion of lower secondary principals with similar responsibilities (see Table A5.2). In Australian primary schools, responsibility for instruction and curriculum tasks appears to be shared between principals and teachers, whereas in Australian lower secondary schools these areas are clearly the responsibility of teachers.

5.5.2 Teachers' sense of control over their work

In 2018, TALIS introduced a measure of teachers' autonomy. Teachers were asked to indicate their level of agreement (*strongly disagree*; *disagree*; *agree*; *strongly agree*) that they had control over a number of areas related to planning and teaching their target class (a class nominated to be the focus of responses).

Australian teachers reported lower agreement (the proportion who agreed or strongly agreed) than on average across the OECD that they had control over course content and assessment of student learning (Table 5.9). The proportion of Australian teachers who agreed that they had control over decisions regarding assessing student learning was also lower than the proportions of teachers in the high-performing PISA countries who agreed with this statement. In other areas, such as student discipline, selecting which teaching methods they would use, and the amount of homework they assigned to their class, Australian teachers recorded high levels of agreement (over 90%), similar to teachers in most of the high-performing PISA countries.

TABLE 5.9 Teachers' autonomy
Results based on responses of lower secondary teachers

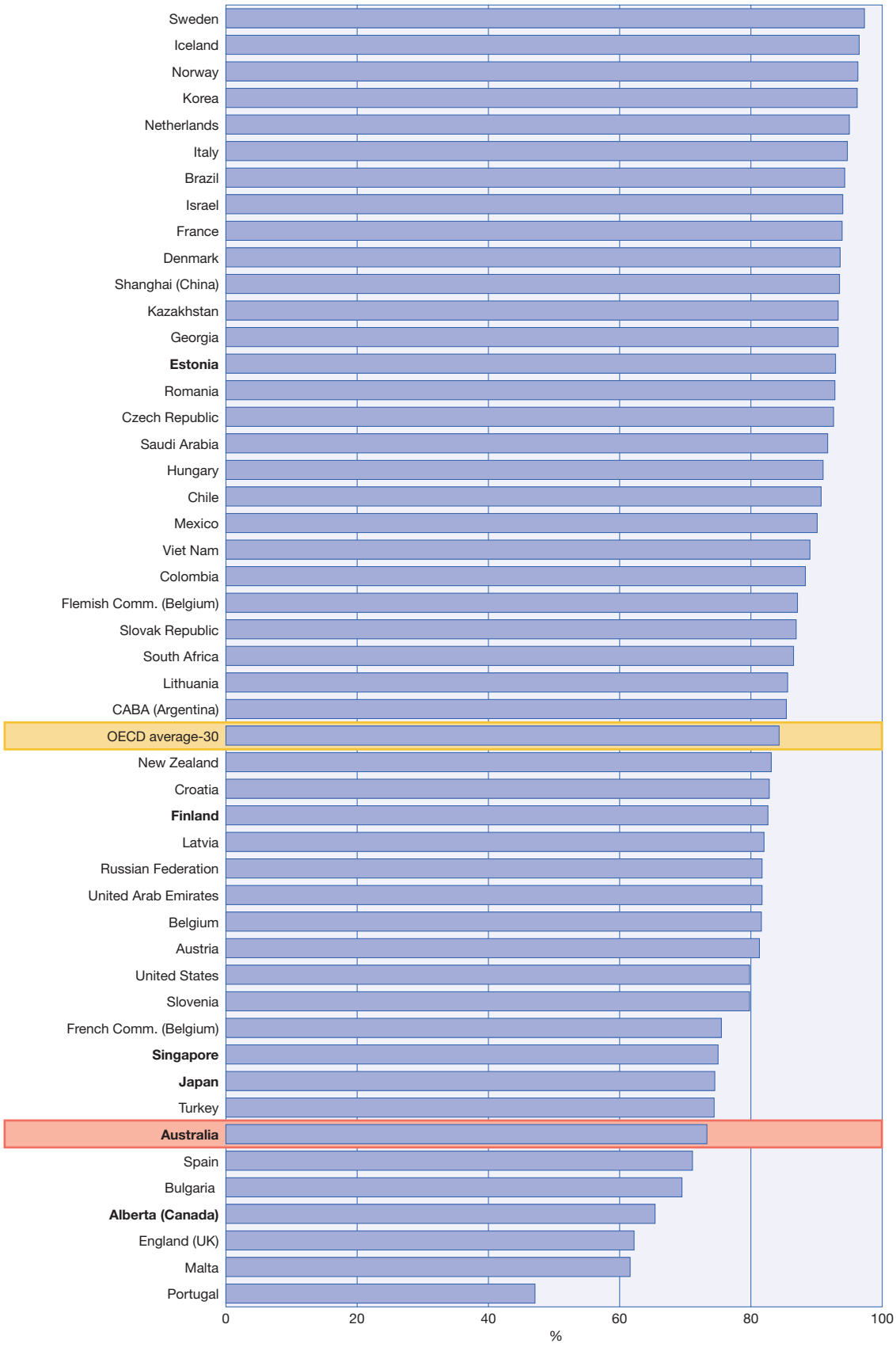
	Percentage of teachers who "agree" or "strongly agree" that they have control over the following areas[1, 2]									
	Determining course content		Selecting teaching methods		Assessing students' learning		Disciplining students		Determining the amount of homework to be assigned	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Australia	73	1.0	96	0.3	87	0.8	93	0.5	93	0.6
OECD average-31	84	0.2	96	0.1	94	0.1	92	0.1	91	0.2
TALIS average-48	85	0.1	96	0.1	95	0.1	92	0.1	92	0.1
High-performing PISA countries										
Alberta (Canada)	65	2.2	96	0.5	95	0.8	91	1.2	90	2.1
Estonia	93	0.6	99	0.2	98	0.3	94	0.6	94	0.4
Finland	83	0.8	98	0.3	95	0.5	93	0.7	97	0.4
Japan	75	0.9	91	0.6	94	0.5	91	0.5	83	0.7
Singapore	75	0.8	97	0.3	92	0.5	93	0.5	91	0.6

[1] The analysis is restricted to teachers reporting that their teaching in the target class is not directed entirely or mainly at special needs students.
[2] These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.
Note: For explanation about choice of high-performing PISA countries refer to Reader's Guide.

Determining course content was an area in which there was wide variety in responses, as shown in Figure 5.11. Australian teachers recorded one of the lower levels of agreement that they had control in this area – at 73 per cent, this was higher than the proportion of teachers in Alberta (Canada) or the proportion of teachers in England (UK) who felt that they had control over their course content. In contrast, 93 per cent of teachers in Estonia and 97 per cent of teachers in Sweden felt that they had control over the content of the courses they taught to their target class.

FIGURE 5.11 Teachers' autonomy in determining course content

Percentage of lower secondary teachers who agree *or* strongly agree *that they have control over determining course content in their target class*[1]



[1] These data refer to a randomly chosen class that teachers currently teach from their weekly timetable. The analysis is restricted to teachers reporting that their target class is not directed entirely or mainly at special needs students.

Note: High-performing PISA countries in bold. For explanation refer to Reader's Guide.

Teachers in Australian schools in metropolitan areas reported lower control over course content than did their peers in rural schools (Table 5.10). There were no other school-level differences in agreement with this item among Australian teachers. Across the OECD on average, however, teachers in private schools and teachers in schools with lower concentrations of students from socioeconomically disadvantaged backgrounds reported higher agreement that they had control over course content than teachers in comparison schools.

TABLE 5.10 Teachers' autonomy over determining course content, by school characteristics
Results based on responses of lower secondary teachers and principals

	Percentage of teachers who "agree" or "strongly agree" that they have control over determining course content[1,2]															
	Total		By school location								By school type					
			Rural area or village (up to 3 000 people)		Town (3 001 to 100 000 people)		City (over 100 000 people)		City - Rural area		Publicly managed schools[6]		Privately managed schools[7]		Private - Public	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	73	1.0	85	4.7	72	2.2	73	1.3	**-12**	5.0	74	1.3	72	1.7	-2	2.2
OECD average-31	84	0.2	84	0.7	84	0.3	84	0.3	0	0.8	83	0.2	85	0.5	**2**	0.5
TALIS average-48	85	0.1	85	0.5	85	0.2	85	0.2	-1	0.6	84	0.2	86	0.4	**2**	0.4
High-performing PISA countries																
Alberta (Canada)	65	2.2	52	10.4	65	3.5	70	2.2	18	11.2	64	2.3	c	c	c	c
Estonia	93	0.6	91	0.9	94	0.9	94	0.9	**4**	1.3	93	0.6	93	2.9	0	2.9
Finland	83	0.8	82	2.5	83	0.9	82	1.5	1	2.9	82	0.8	84	2.6	1	2.7
Japan	75	0.9	c	c	74	1.4	75	1.2	c	c	75	0.9	70	3.2	-5	3.3
Singapore	75	0.8	a	a	a	a	75	0.8	a	a	75	0.8	77	3.8	2	4.0

	Percentage of teachers who "agree" or "strongly agree" that they have control over determining course content[1,2]															
	By concentration of students from socioeconomically disadvantaged homes[3]						By concentration of immigrant students[4]						By concentration of students with special needs[5]					
	Less than or equal to 30% (a)		More than 30% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)	
	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	72	1.2	74	2.0	2	2.4	72	1.3	74	1.5	2	1.9	72	1.3	74	2.1	2	2.6
OECD average-31	84	0.2	83	0.5	**1**	0.5	84	0.2	83	0.5	0	0.6	84	0.2	84	0.4	-1	0.5
TALIS average-48	84	0.2	85	0.4	**1**	0.4	85	0.2	84	0.4	1	0.5	85	0.2	83	0.4	0	0.4
High-performing PISA countries																		
Alberta (Canada)	66	2.3	60	5.6	-6	6.0	64	3.7	68	2.9	4	5.1	69	3.5	61	2.5	-8	4.3
Estonia	93	0.6	89	2.5	-4	2.5	93	0.6	c	c	c	c	93	0.7	92	0.9	-1	1.2
Finland	83	0.8	c	c	c	c	83	0.8	83	2.4	0	2.7	83	0.8	83	1.7	0	2.0
Japan	74	0.9	83	2.7	**9**	2.9	74	0.9	c	c	c	c	75	0.9	68	3.3	-7	3.5
Singapore	75	0.9	c	c	c	c	74	1.1	77	1.3	3	1.8	75	0.8	73	2.9	-3	3.0

[1] The analysis is restricted to teachers reporting that their teaching in the target class is not directed entirely or mainly at special needs students.

[2] These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

[3] "Socioeconomically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care.

[4] "Immigrant students" refers to "students who are immigrants or with a migrant background", as reported by the school principal. An "immigrant student" is one who was born outside the country. A "student with a migrant background" has parents who were both born outside the country.

[5] Students with special needs are those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged.

[6] A publicly managed school is a school whose principal reported that it is managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise. In the Principal Questionnaire, this question does not make any reference to the source of the school's funding which is reported in the preceding question.

[7] A privately managed school is a school whose principal reported that it is managed by a non-governmental organisation (e.g. a church, trade union, business or other private institution). In the Principal Questionnaire, this question does not make any reference to the source of the school's funding, which is reported in the preceding question. In some countries, the privately managed schools category includes schools that receive significant funding from the government (government-dependent private schools).

Notes: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

BOX 5.7 Comparing Australian primary and lower secondary teachers' autonomy

Over 70 per cent of teachers in Australian primary and lower secondary schools agreed that they had control over determining course content for their target class. They also reported similar levels of agreement that they had control over student assessment and discipline (Table A5.7). Teachers in Australian lower secondary schools had higher levels of agreement than teachers in primary schools that they had control over the teaching methods they used in their class (96% compared to 94%) and substantially higher agreement that they had control over the amount of homework assigned (93% compared to 78%).

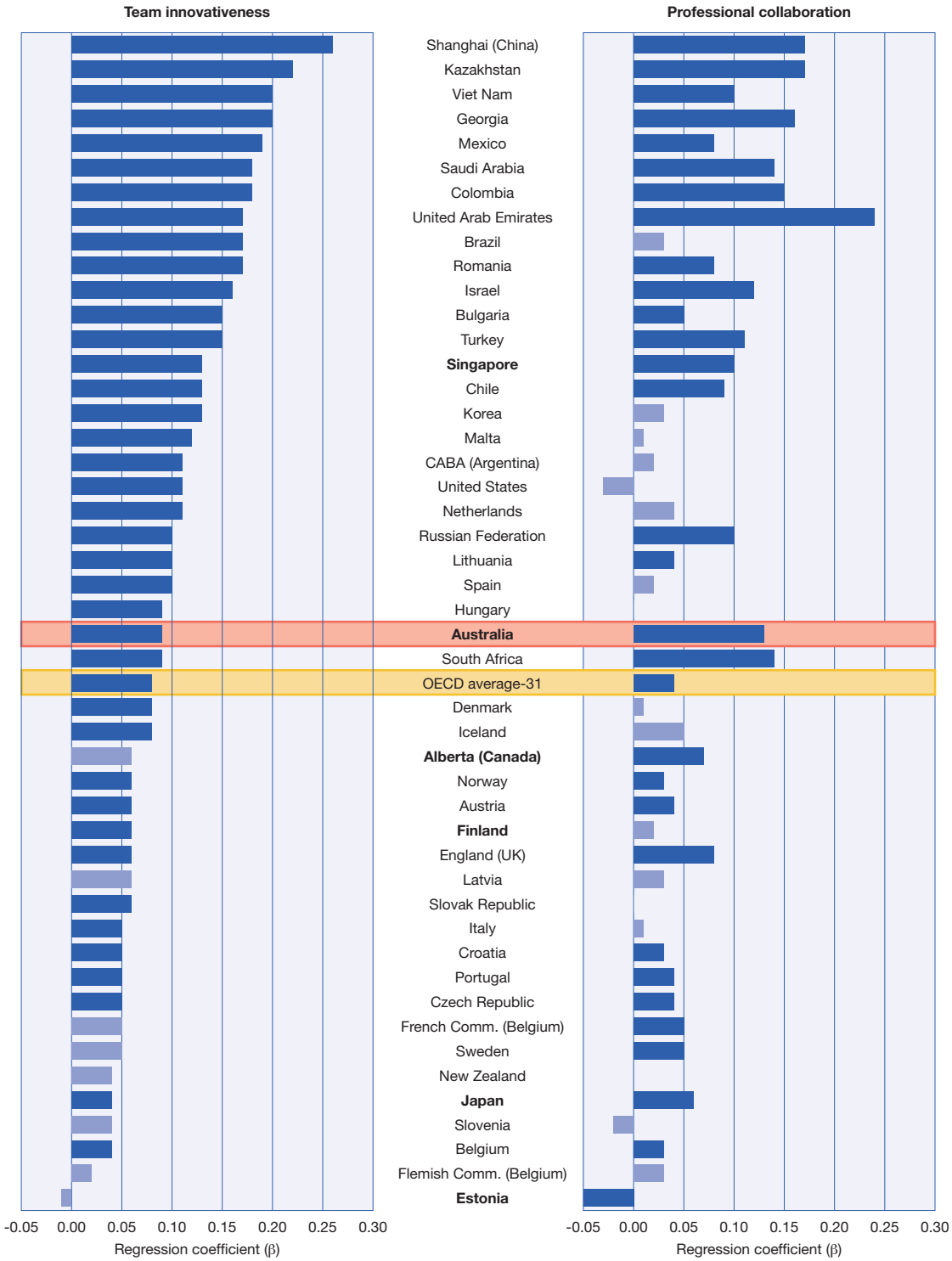
Research has identified having a sense of control and autonomy in decision-making, along with knowledge development and capacity for collaboration with colleagues at work, as important factors in teachers' professionalism (Hargreaves & Fullan, 2012). To investigate the possible relationship between teachers' control or autonomy (measured by teachers' feelings of control over determining course content, selecting teaching methods, assessing students' learning, disciplining students and determining the amount of homework to be assigned) and professional collaboration, a regression analysis was conducted. The results displayed in Figure 5.12 indicate that in most countries, and on average across the OECD, teachers who have a stronger sense of control over decisions that impact on their target class also tend to report more frequent participation in professional collaboration activities (after controlling for teacher and class characteristics).

A regression analysis was also used to explore possible relationships between teachers' sense of autonomy and their team innovativeness (constructed based on teachers' reports of whether most teachers in their school strive to develop new ideas for teaching and learning; are open to change; search for new ways to solve problems; and provide practical support to each other for the application of new ideas). Results indicated that among Australian teachers, and those in 39 other TALIS countries, teachers who feel a greater degree of control over decisions that impact on their target class also tend to report a higher degree of innovativeness in their teams (after controlling for teacher characteristics such as gender, age and years of experience, and class characteristics such as concentration of lower achieving students, students with behavioural problems and students from socioeconomically disadvantaged backgrounds).

Given that the explanatory power of this model is low, these relationships should be interpreted with caution (R^2 varies between 0.01 and 0.06 by country, with R^2= 0.04 for Australia).

FIGURE 5.12 Relationship between teachers' team innovativeness and professional collaboration and target class autonomy

Change in the index of team innovativeness[1] and the index of professional collaboration[2] associated with the index of target class autonomy[3, 4, 5, 6]



[1] The index of team innovativeness refers to teachers' reports of whether most teachers in their school strive to develop new ideas for teaching and learning; whether most teachers in this school are open to change; whether most teachers in this school search for new ways to solve problems; and whether most teachers in this school provide practical support to each other for the application of new ideas.

[2] The index of professional collaboration measures teachers' engagement in deeper forms of collaboration, including teaching jointly as a team in the same class, providing feedback based on classroom observations, engaging in joint activities across different classes and age groups and participating in collaborative professional learning.

[3] The index of teachers' target classroom autonomy measures the level of control teachers feel over determining course content, selecting teaching methods, assessing students' learning, disciplining students and determining the amount of homework to be assigned in their target class.

[4] Results of linear regression based on responses of lower secondary teachers.

[5] These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable. The analysis is restricted to teachers reporting that their target class is not directed entirely or mainly to special needs students.

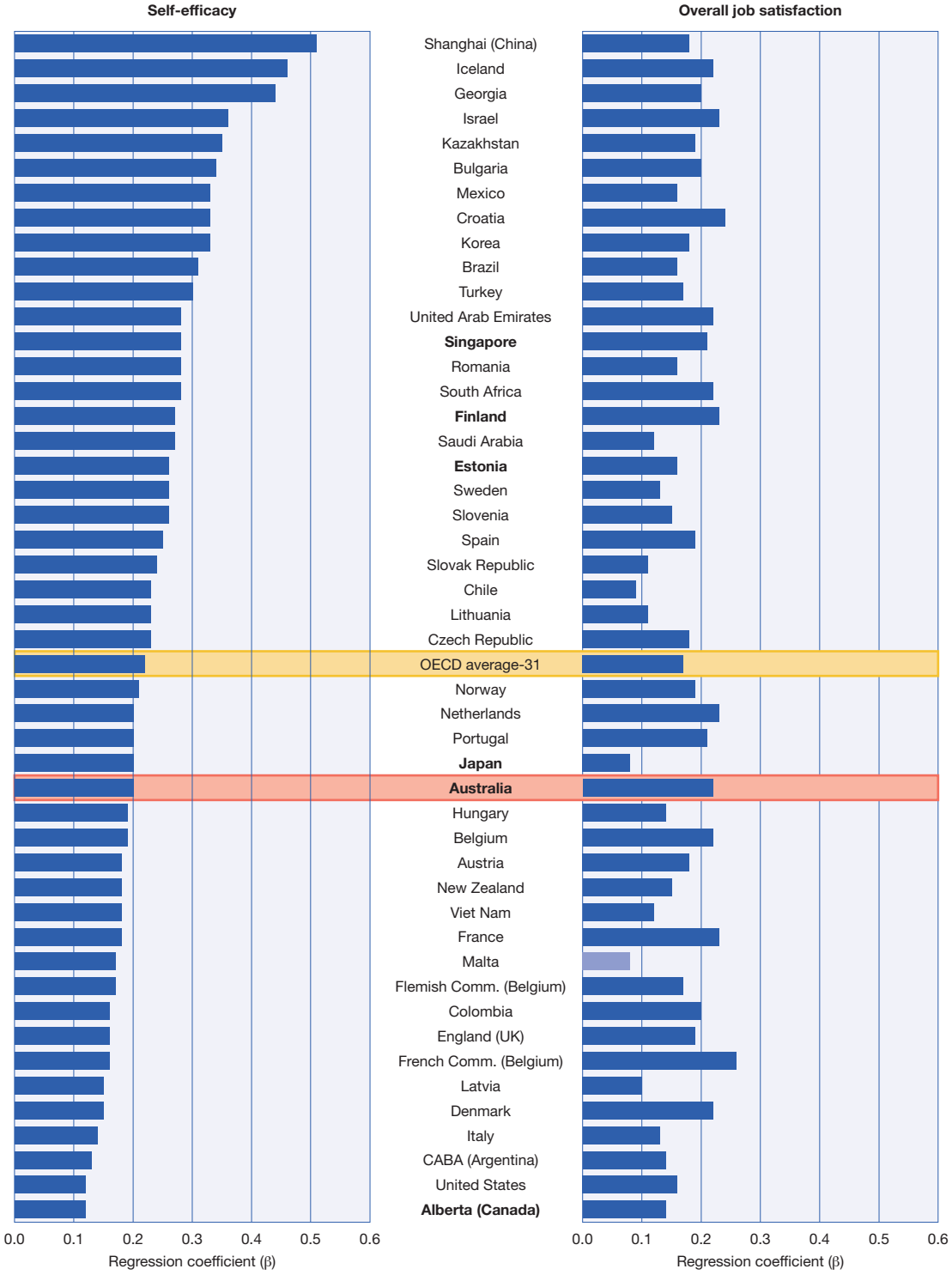
[6] Controlling for the following teacher characteristics: gender, age, working full-time, years of experience as a teacher; and for the following classroom characteristics: share of low academic achievers, share of students with behavioural problems and share of students from socioeconomically disadvantaged homes.

Notes: Statistically significant coefficients are marked in a darker tone. High-performing PISA countries shown in bold. For explanation refer to Reader's Guide.

A series of regression analyses also revealed relationships between teachers' sense of autonomy and their work satisfaction and self-efficacy (Figure 5.13) and reports of wellbeing and stress (Table 5.11). Australian teachers, along with their peers in all other TALIS countries, who reported higher levels of autonomy in decision-making that impacts on their target class also feel more confident in their teaching. Those who have a greater degree of autonomy are more satisfied with their work (apart from teachers in Malta for whom this relationship did not reach significance). Among Australian teachers, along with those from the high-performing PISA countries Estonia, Finland and Singapore and across the OECD on average, those who reported greater levels of autonomy also tended to report lower levels of stress and impact of work on their mental and physical wellbeing (Table 5.11). Results should be interpreted with caution, as the explanatory power of this model is limited, however the importance of teachers' feelings of autonomy in decisions that impact their teaching in terms of its potential influence on teachers' collaboration, innovation, self-efficacy, job satisfaction and wellbeing bears consideration.

FIGURE 5.13 Relationship between teachers' self-efficacy and overall job satisfaction and target class autonomy

Change in the index of self-efficacy[1] and the index of overall job satisfaction[2] associated with the index of target class autonomy[3, 4, 5, 6]



[1] The index of self-efficacy measures teacher self-efficacy in classroom management, instruction and student engagement.

[2] The index of overall job satisfaction measures satisfaction with the profession and the current work environment.

[3] The index of teachers' target classroom autonomy measures the level of control teachers feel over determining course content, selecting teaching methods, assessing students' learning, disciplining students and determining the amount of homework to be assigned in their target class. These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

[4] Results of linear regression based on responses of lower secondary teachers.

[5] These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable. The analysis is restricted to teachers reporting that their target class is not directed entirely or mainly at special needs students.

[6] Controlling for the following teacher characteristics: gender, age, working full-time, years of experience as a teacher; and for the following classroom characteristics: share of low academic achievers, share of students with behavioural problems and share of students from socioeconomically disadvantaged homes.

Notes: Statistically significant coefficients are marked in a darker tone. High-performing PISA countries shown in bold. For explanation refer to Reader's Guide.

TABLE 5.11 Relationship between teachers' wellbeing and stress and teachers' autonomy

Results of linear regression based on responses of lower secondary teachers

	Index of workplace wellbeing and stress[1]									
	Dependent on:									
	Index of satisfaction with target class autonomy[2,3]		Female[4]		Age[5]		Years of experience as a teacher at current school[5]		Working full-time[6]	
	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.
Australia	**-0.12**	0.03	**0.26**	0.09	0.00	0.01	-0.01	0.01	**0.51**	0.12
OECD average-31	**-0.09**	0.00	**0.32**	0.02	**-0.01**	0.00	**0.01**	0.00	**0.29**	0.03
TALIS average-48	**-0.07**	0.00	**0.32**	0.02	**-0.01**	0.00	**0.01**	0.00	**0.22**	0.02
High-performing PISA countries										
Alberta (Canada)	-0.04	0.03	**0.37**	0.13	**-0.03**	0.01	0.02	0.01	0.44	0.24
Estonia	**-0.05**	0.02	**0.45**	0.13	**-0.01**	0.00	0.00	0.00	**0.37**	0.08
Finland	**-0.06**	0.02	**0.41**	0.08	**-0.01**	0.01	0.01	0.01	-0.02	0.16
Japan	-0.03	0.02	**0.18**	0.09	-0.01	0.00	-0.01	0.01	**1.24**	0.14
Singapore	**-0.13**	0.02	0.13	0.07	**-0.03**	0.01	0.00	0.01	**0.38**	0.17

	Index of workplace wellbeing and stress[1]						
	Dependent on:						
	Concentration of low achiever students		Concentration of students with behavioural problem		Concentration of students from socio-economically disadvantaged homes		
	ß	S.E.	ß	S.E.	ß	S.E.	R-squared
Australia	0.01	0.00	**0.02**	0.00	**0.01**	0.00	0.08
OECD average-31	**0.01**	0.00	**0.02**	0.00	**0.00**	0.00	0.06
TALIS average-48	**0.01**	0.00	**0.02**	0.00	**0.00**	0.00	0.06
High-performing PISA countries							
Alberta (Canada)	**0.01**	0.01	0.01	0.01	0.00	0.01	0.06
Estonia	0.00	0.00	**0.03**	0.00	0.00	0.00	0.07
Finland	0.00	0.00	**0.02**	0.00	0.00	0.00	0.05
Japan	0.00	0.00	**0.02**	0.01	0.01	0.01	0.05
Singapore	0.00	0.00	**0.02**	0.00	0.00	0.00	0.08

[1] The index of wellbeing and stress measures the extent to which teachers experience stress in their work; if work leaves room for personal time; the impact on their mental health; and the impact on their physical health

[2] The index of teachers satisfaction' with classroom autonomy measures the the level of control teachers feel over over determining course content, selecting teaching methods, assessing students' learning, disciplining students and determining the amount of homework to be assigned in their target class.

[3] These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

[4] Dummy variable: the reference category is male.

[5] Number of years.

[6] Dummy variable: the reference category is working part-time.

Notes: Statistically significant differences are indicated in bold. For explanation of selection of high-performing PISA countries refer to Reader's Guide.

5.5.3 Teachers' actions towards achieving academic excellence

Given the level of responsibility that teachers in most TALIS countries are reported to have over decisions pertaining to curriculum and instruction policies (see Figure 5.10), it is important to estimate how well prepared teachers are for this responsibility. The academic excellence of teachers was measured in TALIS 2018 using principals' reports of how well the following three statements applied to their school (*not at all*; *somewhat*; *quite a bit*; *a lot*):

- Teachers understand the school's curricular goals
- Teachers succeed in implementing the school's curriculum
- Teachers hold high expectations for student achievement.

The proportion of principals who reported that these applied to their teachers quite a bit or a lot in Australia, the high-performing PISA countries and on average across OECD and TALIS countries is presented in Table 5.12. There was a high degree of similarity across Australia and the countries selected for comparison, with no differences in the proportions of principals agreeing that teachers understood the curricular goals and succeeded in implementing the school's curriculum. A higher proportion of Australian principals (87%), and those across the OECD on average (82%), agreed that their teachers held high expectations for student achievement than was the case in Finland and Japan (73% and 70%, respectively).

TABLE 5.12 Teachers' actions towards achieving academic excellence
Results based on responses of lower secondary principals

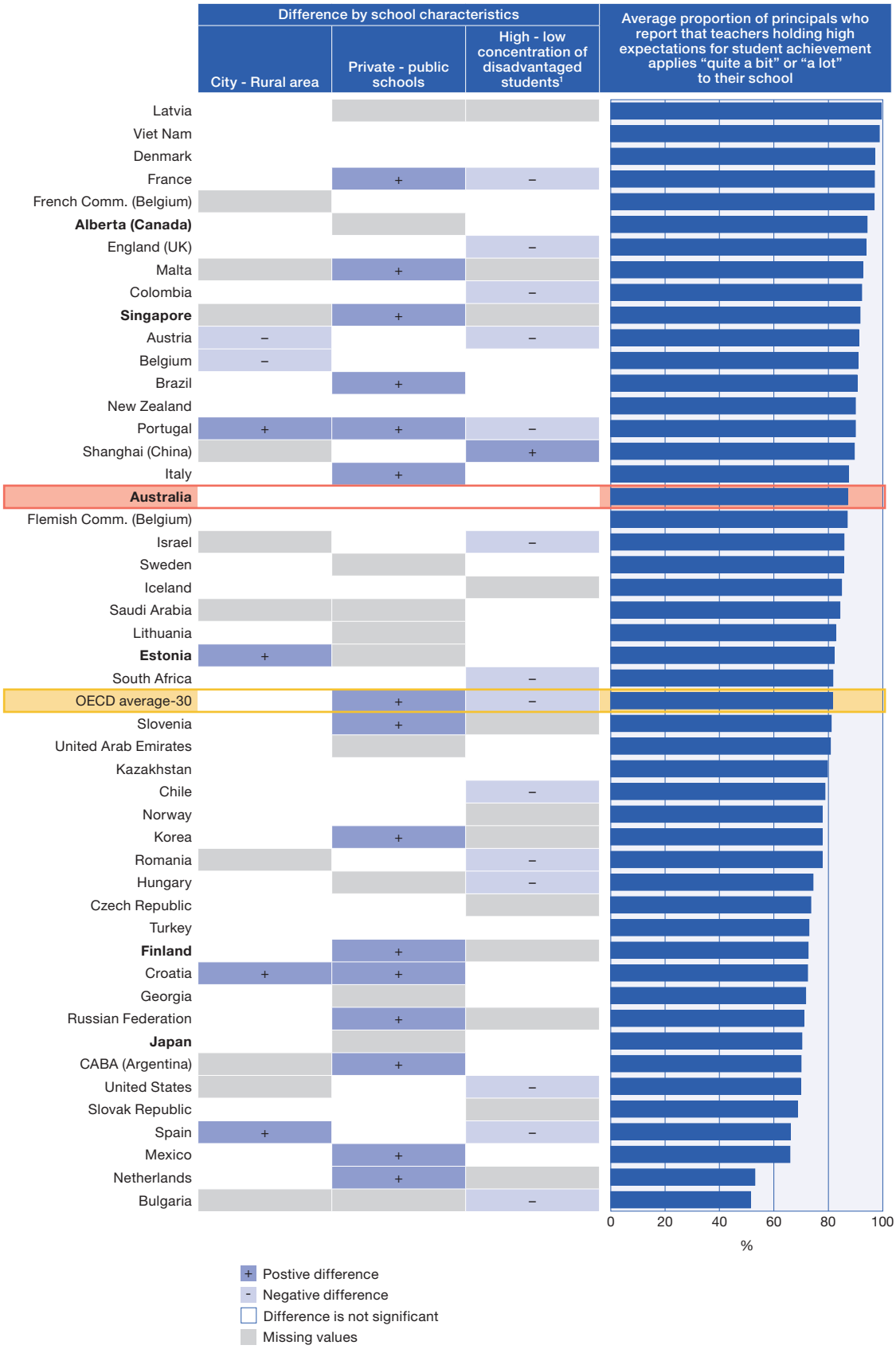
	Percentage of principals who report that the following statements apply "quite a bit" or "a lot" to their school					
	Teachers understand the school's curricular goals		Teachers succeed in implementing the school's curriculum		Teachers hold high expectations for student achievement	
	%	S.E.	%	S.E.	%	S.E.
Australia	84	5.7	90	4.6	87	4.6
OECD average-30	92	0.5	90	0.6	82	0.7
TALIS average-47	93	0.4	91	0.4	81	0.5
High-performing PISA countries						
Alberta (Canada)	92	3.4	97	1.7	94	2.9
Estonia	93	2.0	96	1.5	82	3.0
Finland	84	2.5	87	2.8	73	3.8
Japan	86	2.5	92	2.1	70	3.3
Singapore	92	2.4	87	2.5	92	2.0

Note: For explanation of selection of high-performing PISA countries refer to Reader's Guide.

As shown in Figure 5.14, the high expectations for student achievement held by Australian teachers did not vary across different types of schools. In contrast, on average across the OECD, higher proportions of teachers in private schools and schools with lower concentrations of students from socioeconomically disadvantaged backgrounds, of immigrant background or with special needs held high expectations for student achievement compared to teachers in other schools. A difference in teachers' expectations for student achievement was also found between private and public schools in Singapore and Finland.

FIGURE 5.14 Teachers' high expectation on students' achievement, by school characteristics

Results based on responses of lower secondary principals



[1] High concentration of disadvantaged students refer to schools with more than 30% of students from socioeconomically disadvantaged homes.

Note: High-performing PISA countries in bold. For explanation refer to Reader's Guide.

BOX 5.8 Comparing Australian primary and lower secondary teachers' actions toward achieving academic excellence

A comparison of the responses of principals in Australian schools to the items regarding teachers' actions towards achieving academic excellence revealed similarly high levels of these behaviours across primary and lower secondary schools (Table A5.8). Over 80 per cent of Australian principals in both primary and lower secondary schools reported that their teachers understood the curricular goals and held high expectations for student achievement. Agreement that teachers were successful in implementing the school curriculum was even higher, at 90 per cent in both primary and lower secondary schools.

A regression analysis was conducted to explore the possible relationship between teachers' actions towards academic excellence (summarised in the index of teacher's academic pressure) and principals' use of an instructional leadership style. As shown in Table 5.13, once teacher and school characteristics were controlled for, there was no significant relationship between Australian principals' instructional leadership and their teachers' work to achieve academic excellence. On average across the OECD, and in Japan, there was a positive association between instructional leadership and academic pressure, although it should be noted that these indicators were both based on principals' reports.

TABLE 5.13 Relationship between teachers' academic pressure in the school and principals' instructional leadership

Results of linear regression based on responses of lower secondary principals

	Index of academic pressure[1]							
	Dependent on:							
	Index of instructional leadership[2]		Female[3]		Age[4]		Years of experience as a teacher at current school[4]	
	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.
Australia	0.02	0.08	-0.41	0.34	0.07	0.04	0.03	0.04
OECD average-30	**0.09**	0.02	0.02	0.08	**0.02**	0.01	**0.04**	0.01
TALIS average-47	**0.12**	0.01	0.10	0.06	**0.02**	0.01	**0.03**	0.01
High-performing PISA countries								
Alberta (Canada)	0.13	0.12	-0.58	0.48	0.02	0.05	0.03	0.07
Estonia	0.04	0.07	0.19	0.22	0.01	0.02	0.01	0.01
Finland	0.02	0.11	0.40	0.36	0.04	0.03	0.00	0.03
Japan	**0.23**	0.08	-0.33	0.43	0.02	0.05	0.01	0.06
Singapore	0.11	0.08	-0.04	0.39	**0.11**	0.03	0.14	0.09

	Index of academic pressure[1]						
	Dependent on:						
	School location index[5]		Privately managed schools[6]		School size[7]		
	ß	S.E.	ß	S.E.	ß	S.E.	R-squared
Australia	-0.01	0.40	0.16	0.39	0.26	0.24	0.13
OECD average-30	0.02	0.09	**0.58**	0.12	**0.12**	0.05	0.11
TALIS average-47	0.06	0.07	**0.66**	0.09	**0.08**	0.04	0.12
High-performing PISA countries							
Alberta (Canada)	-0.63	0.39	c	c	0.40	0.34	0.11
Estonia	-0.02	0.31	-0.27	0.44	0.09	0.12	0.02
Finland	0.15	0.43	0.72	0.76	0.54	0.30	0.10
Japan	0.14	0.26	0.34	0.64	-0.07	0.10	0.06
Singapore	a	a	**1.74**	0.45	0.87	0.57	0.23

[1] The index of academic pressure measures principals' account of whether teachers understand the school's curricular goals, whether they succeed in implementing the school's curriculum, whether they hold high expectations for student achievement and whether students have a desire to do well in school.

[2] The index of instructional leadership measures principals' frequency in getting teachers to collaborate, make teachers feel responsible for students' learning and make teachers work towards improving their skills.

[3] Dummy variable: the reference category is male.

[4] Number of years.

[5] Ordinal categorical variable: 0=Rural area or village (up to 3 000 people), 1=Town (3 001 to 100 000 people); 2=City (over 100 000 people).

[6] Dummy variable: the reference category is publicly managed schools.

[7] Number of students (natural logarithm).

Notes: Statistically significant results are indicated in bold. For explanation of selection of high-performing PISA countries refer to Reader's Guide.

5.5.4 Teachers' relations with policy-makers and the media

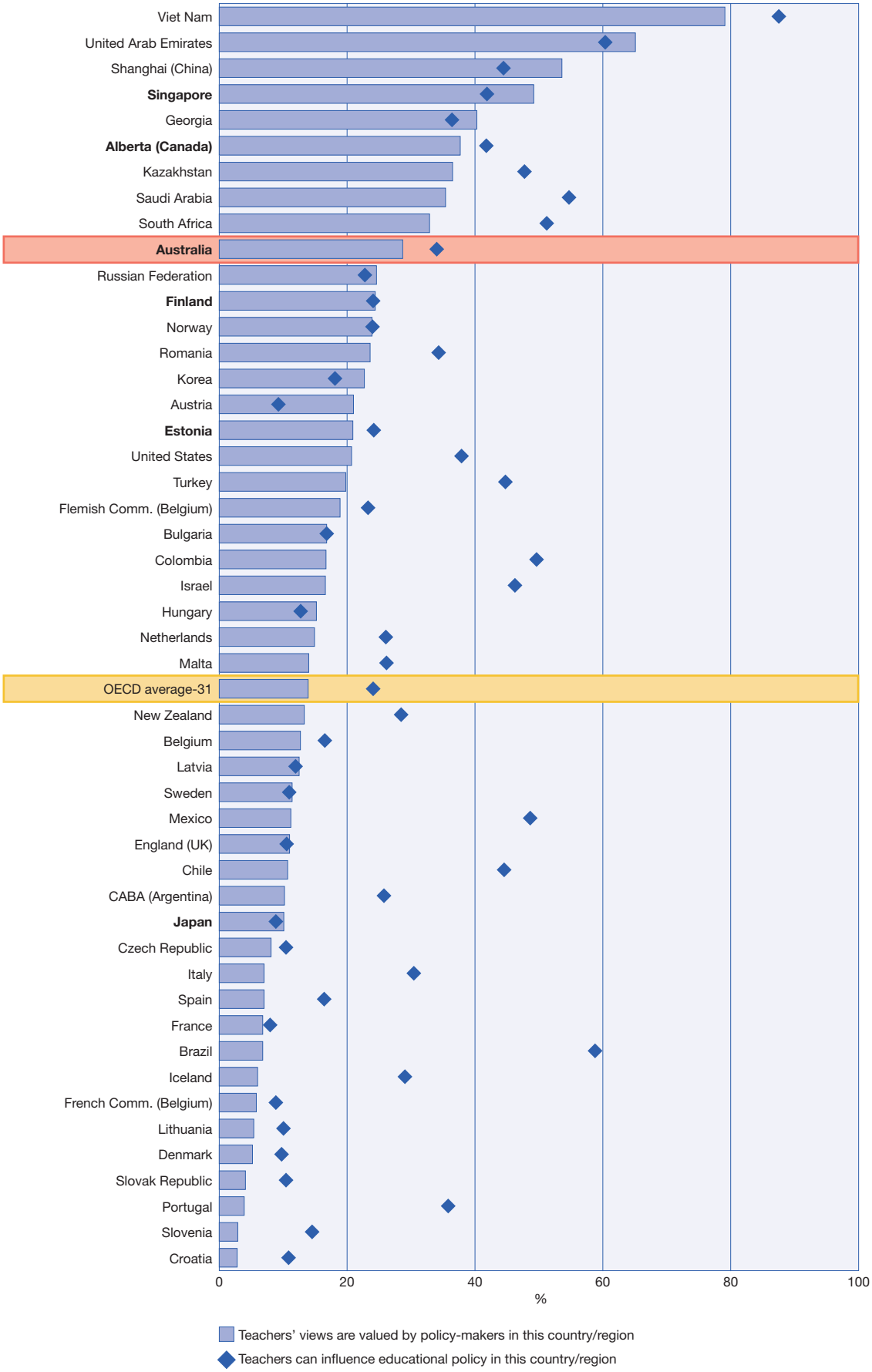
An important component of teachers' leadership capacity outside the school, as well as their satisfaction with their work and the attractiveness of teaching as a career, may be located in the relationships between teachers and policy-makers and the media. Teaching is more likely to be a satisfying career for those in it and attractive to those considering it when teachers are valued by policy-makers and portrayed positively by the media. These relationships were explored in TALIS 2018 by asking teachers to indicate their level of agreement (*strongly disagree*; *disagree*; *agree*; *strongly agree*) with the following statements:

- Teachers' views are valued by policy-makers in this country
- Teachers can influence educational policy in this country
- Teachers are valued by media in this country.

The proportions of teachers in the TALIS countries, along with the average across OECD countries, who agreed (either agree or strongly agree) with the first two statements are compared in Figure 5.15. In Australia, 29 per cent of teachers agreed that teachers' views are valued by policy-makers, placing Australia towards the top of Figure 5.15, and above the average for the OECD (14%). The proportions of teachers in the high-performing PISA countries Singapore and Alberta (Canada) who agreed with this statement were higher again (49% and 38%, respectively). With regard to the influence that teachers can have on educational policy, over one third of Australian teachers (34%) agreed that this was true, which was higher than the proportions of teachers in Estonia and Finland, as well as across the OECD on average. Agreement among teachers in Singapore and Alberta (Canada) was again higher than among Australian teachers. Japan was notable among the high-performing PISA countries for having very low proportions (10% or less) of teachers who agreed that teachers had influence on educational policy or were valued by policy-makers. While some TALIS countries recorded large gaps between the proportions of teachers who agreed that they could influence educational policy and that they were valued by policy-makers (for example, Brazil had a difference of 52 percentage points), this was not the case in Australia or in any of the high-performing PISA countries.

FIGURE 5.15 Teacher's views on their relation with policy-making

Percentage of lower secondary teachers who agree *or* strongly agree *with these statements*



Note: High-performing PISA countries in bold. For explanation refer to Reader's Guide.

Thirty-three per cent of Australian teachers agreed or strongly agreed that teachers are valued by the media. This was higher than the average across the OECD (19%) and TALIS countries (25%) but lower than in the high-performing PISA countries of Singapore (57%), Finland (50%) and Alberta (Canada) (47%). Fewer than 10 per cent of Japanese teachers (8%) agreed that their profession was valued by their country's media.

BOX 5.9 Comparing Australian primary and lower secondary teachers' views of relationships with stakeholders

A comparison of the proportions of Australian teachers in primary and lower secondary schools who agreed (strongly agree or agree) with the statements regarding relationships between teachers and policy-makers and the media found similar proportions of teachers felt that their profession was valued by the media – over 30 per cent (Table A5.9). Agreement with the two statements regarding policy and policy-makers were lower among Australian primary teachers than among lower secondary teachers, suggesting that Australian primary teachers may not feel as valued or influential as their colleagues in lower secondary schools.

References

Ainley. J. & Carstens, R. (2018). *Teaching and Learning International Survey (TALIS) 2018 Conceptual Framework*. OECD Education Working Papers, No. 187. Paris: OECD Publishing. https://dx.doi.org/10.1787/799337c2-en

Council of Australian Governments (COAG). (2019). *Alice Springs (Mparntwe) Education Declaration*. https://uploadstorage.blob.core.windows.net/public-assets/education-au/melbdec/ED19-0230%20-%20SCH%20-%20Alice%20Springs%20(Mparntwe)%20Education%20Declaration_ACC.pdf

Hargreaves, A. & Fullan, M. (2012). *Professional Capital: Transforming Teaching in Every School*. New York, NY:Teachers College Press.

Jerrim. J. & Sims, S. (2019). *The Teaching and Learning International Survey (TALIS) 2018: Research Report*. Institute of Education. https://www.gov.uk/government/publications/teachers-in-primary-and-secondaryschools-talis-2018

OECD. (2013). *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*. OECD Reviews of Evaluation and Assessment in Education. Paris, OECD Publishing. https://dx.doi.org/10.1787/9789264190658-en

OECD. (2014). *TALIS 2013 Results: An International Perspective on Teaching and Learning*. Paris: OECD Publishing. https://dx.doi.org/10.1787/9789264196261-en

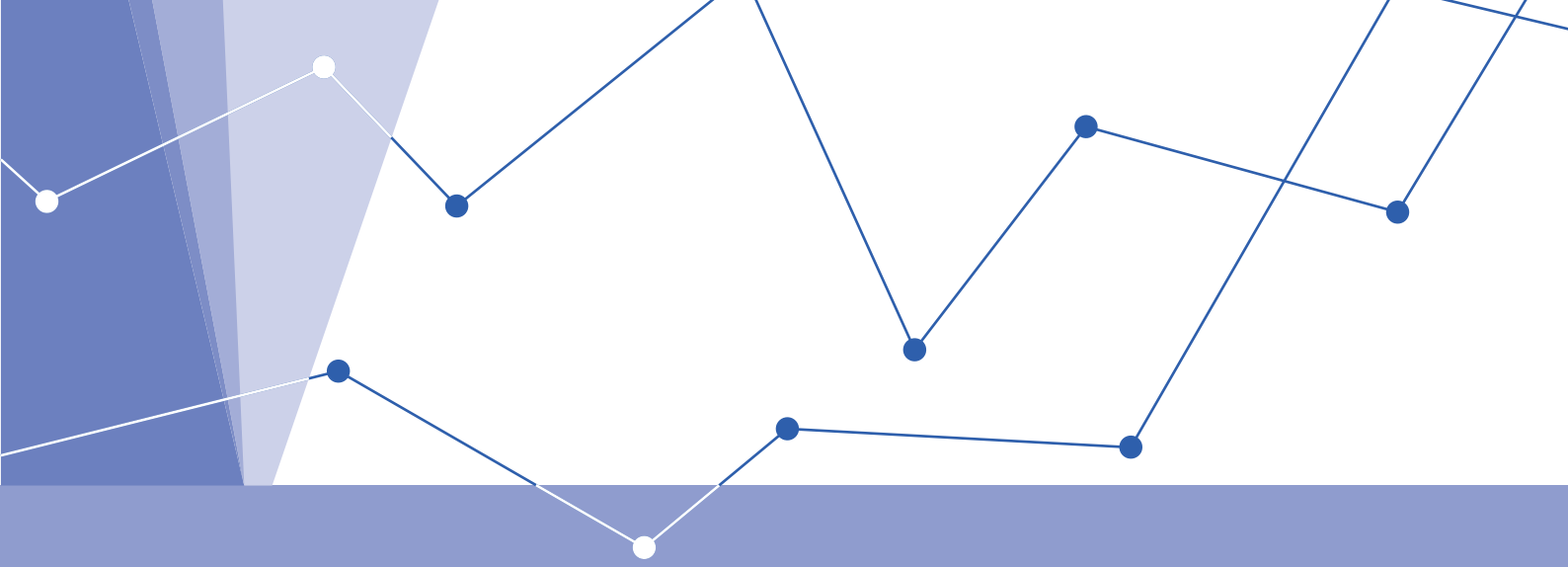
OECD. (2018). *Education at a glance 2018: OECD indicators*. Paris: OECD Publishing. https://dx.doi.org/10.1787/eag-2018-en

OECD. (2019). *TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners*. Paris: OECD Publishing. https://doi.org/10.1787/19cf08df-en

OECD (2020) *TALIS 2018 Results (Volume II): Teachers and School Leaders as Valued Professionals*. Paris: OECD Publishing. https://doi.org/10.1787/19cf08df-en

Schleicher, A. (2018). *Valuing our Teachers and Raising their Status: How Communities Can Help*. International Summit on the Teaching Profession. Paris: OECD Publishing. http://dx.doi.org/10.1787/9789264292697-en

Thomson, S. & Hillman, K. (2019). *The Teaching and Learning International Survey (TALIS) 2018*. Australian Report, Volume 1: Teachers and School Leaders. Camberwell: Australian Council for Educational Research (ACER). https://research.acer.edu.au/talis/6



Appendix

TABLE A2.1 Relationship between teaching being the first choice as a career and teachers' view of the way society values their profession

Results of binary logistic regression based on responses of lower secondary teachers[1]

	Teaching first choice as a career[2]																			
	Dependent on:																			
	The teaching profession is valued in society[3]		Female[4]		Age[5]		Years of experience as a teacher at current school[5]		Novice teacher[6]		STEM teacher[7]		Working full-time[8]		Classroom composition: share of low achiever students[9]		Classroom composition: share of students with behavioural problems[9]		Classroom composition: share of students from socio economically disadvantaged homes[9]	
	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.	Odds ratio	S.E.
Australia	**1.35**	0.14	**1.68**	0.18	**0.96**	0.01	**1.05**	0.01	**0.59**	0.08	0.78	0.13	0.88	0.12	1.00	0.00	1.00	0.00	0.99	0.00
OECD average-31	**1.30**	0.04	**1.60**	0.04	**0.97**	0.00	**1.04**	0.00	**0.66**	0.02	**0.80**	0.02	**1.28**	0.07	**1.00**	0.00	1.00	0.00	1.00	0.00
TALIS average-48	**1.45**	0.03	**1.63**	0.03	**0.98**	0.00	**1.03**	0.00	**0.67**	0.02	**0.83**	0.02	**1.26**	0.05	**1.00**	0.00	**1.00**	0.00	1.00	0.00
High-performing PISA countries																				
Alberta (Canada)	1.14	0.22	**1.80**	0.33	**0.97**	0.01	**1.04**	0.02	0.99	0.28	0.80	0.23	1.06	0.35	1.00	0.01	1.01	0.01	0.99	0.01
Estonia	**1.28**	0.12	**2.66**	0.31	0.99	0.00	**1.03**	0.00	**0.47**	0.07	1.06	0.11	**1.43**	0.15	1.00	0.00	1.00	0.00	1.00	0.01
Finland	**1.23**	0.12	1.17	0.12	**0.93**	0.01	**1.05**	0.01	**0.63**	0.08	**0.70**	0.09	0.99	0.18	0.99	0.00	1.00	0.00	1.00	0.00
Japan	**1.65**	0.17	**0.77**	0.07	**0.98**	0.01	1.01	0.01	0.73	0.14	0.81	0.11	1.17	0.19	1.00	0.00	1.01	0.00	1.00	0.00
Singapore	**1.62**	0.17	**1.29**	0.12	**0.96**	0.01	**1.04**	0.01	**0.72**	0.09	0.96	0.15	0.97	0.21	1.00	0.00	1.00	0.00	1.00	0.00

[1] An odds ratio indicates the degree to which an explanatory variable is associated with a categorical outcome variable. An odds ratio below one denotes a negative association; an odds ratio above one indicates a positive association; and an odds ratio of one means that there is no association.

[2] Dummy variable: the reference category is teachers reporting that teaching was not the first choice as a career.

[3] Dummy variable: the reference category is "disagree" or "strongly disagree" with the statement "I think that the teaching profession is valued in society".

[4] Dummy variable: the reference category is male.

[5] Number of years.

[6] Dummy variable: the reference category are teachers with more than 5 years of teaching experience.

[7] Dummy variable: the reference category are teachers not teaching mathematics, science and technology.

[8] Dummy variable: the reference category is working part-time.

[9] Central values of the percentage ranges: 0%, 5%, 20%, 45% or 80%.

Notes: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

TABLE A2.2 Relationship between job satisfaction and teachers' view of the way society values their profession

Results of linear regression based on responses of lower secondary teachers

	Index of job satisfaction[1]																
	Dependent on:																
	The teaching profession is valued in society[2]		Female[3]		Age[4]		Years of experience as a teacher at current school[4]		Working full-time[5]		Classroom composition: share of low achiever students[6]		Classroom composition: share of students with behavioural problems[6]		Classroom composition: share of students from socio economically dis-advantaged homes[6]		
	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	R^2
Australia	**1.26**	0.11	0.13	0.11	-0.01	0.01	**0.02**	0.01	0.05	0.14	-0.01	0.00	**-0.01**	0.00	0.00	0.00	0.11
OECD average-31	**1.03**	0.02	**0.17**	0.02	**0.00**	0.00	**0.00**	0.00	0.02	0.02	**-0.01**	0.00	**-0.01**	0.00	**0.00**	0.00	0.08
TALIS average-48	**1.10**	0.02	**0.12**	0.02	0.00	0.00	**0.00**	0.00	0.03	0.02	**-0.01**	0.00	**-0.01**	0.00	**0.00**	0.00	0.10
High-performing PISA countries																	
Alberta (Canada)	**1.24**	0.19	-0.02	0.20	**0.03**	0.01	-0.01	0.02	**-0.45**	0.23	0.00	0.01	-0.02	0.01	0.00	0.01	0.12
Estonia	**1.03**	0.08	0.10	0.11	0.00	0.00	0.00	0.00	-0.09	0.07	0.00	0.00	-0.01	0.00	-0.01	0.00	0.07
Finland	**1.41**	0.07	0.07	0.09	-0.01	0.01	0.00	0.01	**0.46**	0.17	0.00	0.00	**-0.01**	0.00	0.00	0.00	0.12
Japan	**1.10**	0.06	**-0.17**	0.07	-0.01	0.00	**0.02**	0.01	**-0.46**	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.09
Singapore	**1.20**	0.09	-0.18	0.09	0.01	0.00	0.01	0.01	-0.04	0.19	0.00	0.00	**-0.02**	0.00	0.00	0.00	0.11

[1] The index of job satisfaction measures teacher satisfaction with both profession and work environment.

[2] Dummy variable: the reference category is "disagree" or "strongly disagree" with the statement "I think that the teaching profession is valued in society".

[3] Dummy variable: the reference category is male.

[4] Number of years.

[5] Dummy variable: the reference category is working part-time.

[6] Central values of the percentage ranges: 0%, 5%, 20%, 45% or 80%.

Notes: Statistically significant values are indicated in bold. For explanation about choice of high-performing PISA countries refer to Reader's Guide.

TABLE A2.3 Sources of Australian teachers' stress

Results based on responses of primary and lower secondary teachers

	Percentage of teachers for whom the following are sources of stress "quite a bit" or "a lot"																					
	Having too much lesson preparation		Having too many lessons to teach		Having too much marking		Having too much administrative work to do[1]		Having extra duties due to absent teachers		Being held responsible for students' achievement		Maintaining classroom discipline		Being intimidated or verbally abused by students		Keeping up with changing requirements from local, municipal/ regional, state or national/ federal authorities		Addressing parent or guardian concerns		Modifying lessons for students with special needs	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary teachers	39	1.0	29	0.8	33	1.0	49	1.0	13	0.7	40	1.0	31	1.1	9	0.7	42	1.0	31	1.1	30	1.0
Secondary teachers	30	1.0	25	0.8	43	1.0	55	1.0	24	0.8	37	1.0	28	0.9	13	0.6	38	1.0	24	0.8	25	1.1

[1] For example, filling out forms.

TABLE A2.4 Sources of Australian principals' stress

Results based on responses of primary and lower secondary principals

	Percentage of principals for whom the following are sources of stress "quite a bit" or "a lot"																	
	Having too much teacher appraisal and feedback work to do		Having too much administrative work to do[1]		Having extra duties due to absent school staff		Being held responsible for students' achievement		Maintaining school discipline		Being intimidated or verbally abused by students		Keeping up with changing requirements from local, municipal/ regional, state or national/ federal authorities		Addressing parent or guardian concerns		Accommo-dating students with special needs	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary principals	27	4.2	77	3.5	24	4.1	41	4.2	34	4.4	5	1.5	59	3.7	56	4.2	31	3.8
Secondary principals	9	2.0	74	5.4	18	4.6	34	5.0	37	5.1	1	0.6	47	5.5	43	6.2	18	4.7

[1] For example, filling out forms.

TABLE A3.1 Australian teachers' employment on fixed-term and permanent contracts

	Percentage of teachers with the following employment status					
	Permanent employment[1]		Fixed-term contract: more than 1 school year		Fixed-term contract: less than or 1 school year	
	%	S.E.	%	S.E.	%	S.E.
Primary teachers	76	0.9	8	0.5	16	0.7
Lower secondary teachers	86	0.7	5	0.5	10	0.6

[1] Permanent employment refers to an ongoing contract with no fixed end-point before the age of retirement.

TABLE A3.2 Australian teachers' reports of working part-time

	Percentage of teachers with the following employment status, in terms of working hours, across all teaching employments[1]							
	Full-time (more than 90% of full-time hours)		Part-time (71-90% of full-time hours)		Part-time (50-70% of full-time hours)		Part-time (less than 50% of full-time hours)	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary teachers	73	0.9	14	0.8	8	0.6	4	0.4
Lower secondary teachers	84	0.7	10	0.6	5	0.4	2	0.3

[1] Part-time teachers are defined as those who work up to 90% of full-time hours. The employment status across all teaching employments has been assumed to be equal to the employment status at the surveyed school for teachers who: (1) reported to work in only one school; (2) did not report their employment status across all teaching employments; (3) reported their employment status at the surveyed school.

TABLE A3.3 Australian principals' reports of working part-time, and teaching obligations

	Percentage of principals with the following employment status, in terms of working hours							
	Full-time without teaching obligation[1]		Full-time with teaching obligation[1]		Part-time without teaching obligation[2]		Part-time with teaching obligation[2]	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary teachers	80	3.8	17	3.8	1.0	0.6	2	1.2
Lower secondary teachers	78	6.5	22	6.5	0.2	0.2	0	0.0

[1] Full-time employment is defined as more than 90% of full-time hours.

[2] Part-time employment is defined as up to 90% of full-time hours.

TABLE A3.4 Consequences of formal teacher appraisal on contract dismissal and non-renewal, by school responsibilities and frequency of appraisal (Australia, OCED and TALIS averages)

	Percentage of lower secondary teachers[1] whose school principals report that their teachers' formal appraisal "sometimes", "most of the time" or "always" results in dismissal or non-renewal of contract																	
	By school management[2] responsibility over the determination of teachers' salary increases						By school management[2] responsibility over dismissing or suspending teachers from employment						By frequency of appraisal by the school management[2]					
	No "significant responsibility"[3] (a)		"Significant responsibility"[3] (b)		(b) - (a)		No "significant responsibility"[3] (a)		"Significant responsibility"[3] (b)		(b) - (a)		At least once per year[4] (a)		Every two years or less often[5] (b)		(b) - (a)	
	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	72	0.1	77	0.1	**4**	0.2	55	0.2	79	0.1	**24**	0.3	81	0.2	72	0.1	**-8**	0.2
OECD average-30	46	1.2	63	1.5	**15**	2.0	28	1.5	60	1.0	**27**	2.2	49	1.7	52	0.8	**6**	1.9
TALIS average-47	43	0.8	63	1.2	**18**	1.5	27	1.1	59	0.8	**30**	1.7	49	1.6	49	0.6	**5**	1.8

[1] Excluding teachers whose school principals report that their teachers are never formally appraised by any of the sources on which TALIS collects information ("principal"; "other member(s) of the school management team"; "assigned mentors"; "other teachers (not part of the school management team)" or "external individuals or bodies").

[2] "School management" means the principal or other members of the school management team.

[3] A "significant responsibility" is one where an active role is played in decision-making.

[4] Appraised "once every two years", "less than once every two years" or "never" both by the principal and by other members of the school management team.

[5] Appraised "once per year" or "twice or more per year" by the principal or by other members of the school management team (or by both).

Note: Statistically significant differences are indicated in bold.

TABLE A3.5 Consequences of formal teacher appraisal on teacher salaries and bonuses, by school characteristics (Australia, OCED and TALIS averages)

	Percentage of lower secondary teachers[1] whose school principals report that their teachers' formal appraisal "sometimes", "most of the time" or "always" results in an increase in a teacher's salary or payment of a financial bonus																													
	Total		By school location								By school type						By concentration of students from socioeconomically disadvantaged homes[2]						By concentration of immigrant students[3]						By concentration of students with special needs[4]					
			Rural area or village (up to 3 000 people)		Town (3 001 to 100 000 people)		City (over 100 000 people)		City - Rural area		Publicly managed schools[5]		Privately managed schools[6]		Private - Public		Less than or equal to 30% (a)		More than 30% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	12	0.1	0	0.0	13	0.0	13	0.1	**13**	0.1	10	0.1	15	0.2	**5**	0.2	15	0.1	5	0.2	**-10**	0.2	15	0.2	10	0.0	**-5**	0.2	15	0.1	8	0.1	**-8**	0.2
OECD average-30	41	0.7	39	1.6	40	1.0	44	1.1	**5**	2.0	38	0.7	50	1.9	**15**	2.0	41	0.8	34	1.7	-2	2.0	41	0.7	35	1.8	3	2.1	41	0.8	38	1.2	-3	1.5
TALIS average-47	45	0.5	42	1.3	43	0.8	49	0.9	**6**	1.7	42	0.5	58	1.4	**19**	1.5	45	0.6	41	1.5	-3	1.7	45	0.6	37	1.7	1	1.9	45	0.6	38	1.1	**-3**	1.3

[1] Excluding teachers whose school principals report that their teachers are never formally appraised by any of the sources on which TALIS collects information ("principal"; "other member(s) of the school management team"; "assigned mentors"; "other teachers (not part of the school management team)" or "external individuals or bodies").

[2] "Socioeconomically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care.

[3] "Immigrant students" refers to "students who are immigrants or with a migrant background", as reported by the school principal. An "immigrant student" is one who was born outside the country. A "student with a migrant background" has parents who were both born outside the country.

[4] Students with special needs are those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged.

[5] A publicly managed school is a school whose principal reported that it is managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise. In the Principal Questionnaire, this question does not make any reference to the source of the school's funding which is reported in the preceding question.

[6] A privately managed school is a school whose principal reported that it is managed by a non-governmental organisation (e.g. a church, trade union, business or other private institution). In the Principal Questionnaire, this question does not make any reference to the source of the school's funding, which is reported in the preceding question. In some countries, the privately managed schools category includes schools that receive significant funding from the government (government-dependent private schools).

Note: Statistically significant differences are indicated in bold.

TABLE A3.6 Consequences of formal teacher appraisal on dismissal and non-renewal of contract, by school characteristics, Australia, OECD and TALIS averages

	Percentage of lower secondary teachers[1] whose school principals report that their teachers' formal appraisal "sometimes", "most of the time" or "always" results in dismissal or non-renewal of contract																													
	Total		By school location								By school type						By concentration of students from socioeconomically disadvantaged homes[2]						By concentration of immigrant students[3]						By concentration of students with special needs[4]					
			Rural area or village (up to 3 000 people)		Town (3 001 to 100 000 people)		City (over 100 000 people)		City - Rural area		Publicly managed schools[5]		Privately managed schools[6]		Private - Public		Less than or equal to 30% (a)		More than 30% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)		Less than or equal to 10% (a)		More than 10% (b)		(b) - (a)	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.	%	S.E.	%	S.E.	% dif.	S.E.
Australia	75	0.1	76	0.7	73	0.2	75	0.1	0	0.7	74	0.1	76	0.1	**2**	0.2	77	0.1	69	0.2	**-8**	0.3	78	0.1	70	0.1	**-7**	0.2	77	0.1	71	0.2	**-7**	0.2
OECD average-30	51	0.7	39	1.6	50	0.9	57	1.3	**17**	2.3	46	0.7	67	2.0	**23**	2.2	53	0.8	45	1.7	-4	2.0	49	0.7	57	1.7	2	2.0	51	0.8	51	1.3	-1	1.6
TALIS average-47	48	0.5	37	1.3	46	0.8	55	1.0	**18**	1.8	42	0.6	72	1.5	**31**	1.7	50	0.7	41	1.6	**-6**	1.8	47	0.6	52	1.7	1	1.9	48	0.6	52	1.4	0	1.6

[1] Excluding teachers whose school principals report that their teachers are never formally appraised by any of the sources on which TALIS collects information ("principal"; "other member(s) of the school management team"; "assigned mentors"; "other teachers (not part of the school management team)" or "external individuals or bodies").

[2] "Socioeconomically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care.

[3] "Immigrant students" refers to "students who are immigrants or with a migrant background", as reported by the school principal. An "immigrant student" is one who was born outside the country. A "student with a migrant background" has parents who were both born outside the country.

[4] Students with special needs are those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged.

[5] A publicly managed school is a school whose principal reported that it is managed by a public education authority, government agency, municipality, or governing board appointed by government or elected by public franchise. In the Principal Questionnaire, this question does not make any reference to the source of the school's funding which is reported in the preceding question.

[6] A privately managed school is a school whose principal reported that it is managed by a non-governmental organisation (e.g. a church, trade union, business or other private institution). In the Principal Questionnaire, this question does not make any reference to the source of the school's funding, which is reported in the preceding question. In some countries, the privately managed schools category includes schools that receive significant funding from the government (government-dependent private schools).

Note: Statistically significant differences are indicated in bold.

TABLE A3.7 Formal teacher appraisal in primary and lower secondary education, by source

	Percentage of teachers whose school principals report that their teachers are never formally appraised by any source of appraisal[1]		Sources providing formal teacher appraisal in the school, average number across teachers[2]		Percentage of teachers whose school principals report that their teachers are never formally appraised by the following sources of appraisal[3,4]										Percentage of teachers whose school principals report that their teachers are formally appraised at least once a year by the following sources of appraisal									
					School principal		Other members of the school management team		Teacher's mentor		Other teachers		External individuals or bodies		School principal		Other members of the school management team		Teacher's mentor		Other teachers		External individuals or bodies	
	%	S.E.	Mean	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary teachers	6	0.1	3	0.0	10	0.1	11	0.1	30	0.1	36	0.1	63	0.1	74	0.1	78	0.1	59	0.1	57	0.1	13	0.1
Secondary teachers	2	0.0	4	0.0	23	0.1	4	0.0	14	0.1	20	0.1	60	0.1	44	0.1	67	0.1	62	0.1	51	0.1	10	0.1

[1] This column presents the percentage of teachers whose school principals report that their teachers are never formally appraised by any of the sources on which TALIS collects information ("principal"; "other member(s) of the school management team"; "assigned mentors"; "other teachers (not part of the school management team)" or "external individuals or bodies").

[2] "Across teachers" indicates that (for consistency with the other columns of this table) the average number of sources of appraisal has been calculated with teacher weights.

[3] These columns report the proportion of teachers working in schools where the principals reported that teachers are not appraised by certain sources (they may be appraised by other sources). The proportion of teachers working in schools where the principals reported that teachers are not appraised by any source (i.e., they are not appraised at all) is reported in the first column of this table.

[4] Teachers from all schools are included in this estimation (also schools without appraisal procedures in places or where teachers have no mentors).

TABLE A3.8 Methods for providing formal teacher appraisal in primary and lower secondary education

	Methods used for providing formal teacher appraisal in the school, average number across teachers[1]		Percentage of teachers[2] whose school principals report that the following types of information are used in the formal appraisal of teachers' work by at least one source of appraisal[3]											
			Observations of classroom teaching		Student survey responses related to teaching		Assessments of teachers' content knowledge		Students' external results[4]		School-based and classroom-based results[5]		Self-assessments of teachers' work[6]	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary teachers	5	0.0	98	0.0	84	0.1	69	0.1	91	0.1	93	0.1	70	0.1
Secondary teachers	5	0.0	98	0.0	91	0.0	60	0.1	91	0.1	94	0.1	72	0.1

[1] "Across teachers" indicates that (for consistency with the other columns of this table) the average number of methods of appraisal has been calculated with teacher weights.

[2] Excluding teachers whose school principals report that their teachers are never formally appraised by any of the sources on which TALIS collects information ("principal"; "other member(s) of the school management team"; "assigned mentors"; "other teachers (not part of the school management team)" or "external individuals or bodies").

[3] The appraisal can be provided by the following bodies: principal, members of the school management team, assigned mentors, other teachers and external individuals or bodies.

[4] For instance, national test scores.

[5] For instance, performance results, project results or test scores.

[6] For instance, presentation of a portfolio assessment or analysis of teaching using video.

TABLE A3.9 Consequences of formal teacher appraisal for Australian teachers

	Outcomes of formal teacher appraisal in the school, average number across teachers[1]		Percentage of teachers[2] whose school principals report that the following occurs after a formal teacher appraisal[3]															
			Measures to remedy any weaknesses in teaching are discussed with the teacher		A development/ training plan is developed		Material sanctions, such as reduced annual increases in pay, are imposed		A mentor is appointed to help the teacher improve his/ her teaching		A change in a teacher's work responsibilities[4]		An increase in a teacher's salary or payment of a financial bonus		A change in the likelihood of a teacher's career advancement		Dismissal or non-renewal of contract	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary teachers	5	0.0	98	0.0	96	0.0	6	0.1	96	0.1	73	0.1	14	0.1	49	0.1	61	0.1
Secondary teachers	5	0.0	99	0.0	97	0.0	8	0.0	97	0.0	82	0.1	12	0.1	67	0.1	75	0.1

[1] "Across teachers" indicates that (for consistency with the other columns of this table) the average number of methods of appraisal has been calculated with teacher weights.

[2] Excluding teachers whose school principals report that their teachers are never formally appraised by any of the sources on which TALIS collects information ("principal"; "other member(s) of the school management team"; "assigned mentors"; "other teachers (not part of the school management team)" or "external individuals or bodies").

[3] Includes principals who reported that the following occurs "sometimes", "most of the time", or "always"; excludes principals who reported that it "never" occurs.

[4] For instance, an increase or decrease in his/her teaching load, administrative/managerial responsibilities or mentor responsibilities.

Note: For explanation about choice

TABLE A3.10 Lower secondary teachers' satisfaction with their salary and contracts (Australia, OECD and TALIS averages)

	Percentage of teachers who "agree" or "strongly agree" with the following statements			
	I am satisfied with the salary I receive for my work		Apart from my salary, I am satisfied with the terms of my contract/ employment[1]	
	%	S.E.	%	S.E.
Australia	67	1.0	78	0.9
OECD average-31	39	0.2	66	0.2
TALIS average-48	39	0.2	66	0.2

[1] For example, benefits, work schedule.

TABLE A3.11 Lower secondary school principals' satisfaction with their salary and contracts, Australia, OECD and TALIS averages

	Percentage of principals who "agree" or "strongly agree" with the following statements			
	I am satisfied with the salary I receive for my work		Apart from my salary, I am satisfied with the terms of my contract/ employment[1]	
	%	S.E.	%	S.E.
Australia	74	5.1	84	3.0
OECD average-30	47	0.9	66	0.2
TALIS average-47	47	0.7	66	0.2

[1] For example, benefits, work schedule.

TABLE A3.12 Australian primary teachers' and principals' satisfaction with their salary and contracts

	Percentage who "agree" or "strongly agree" with the following statements			
	I am satisfied with the salary I receive for my work		Apart from my salary, I am satisfied with the terms of my contract/ employment[1]	
	%	S.E.	%	S.E.
Primary teachers	63	0.9	79	0.7
Primary principals	69	3.9	75	3.6

[1] For example, benefits, work schedule.

TABLE A4.1 Teacher collaboration

Results based on responses of primary and lower secondary teachers

	Percentage of teachers who report that they do the following in their school with the following frequency																																							
	Teach jointly as a team in the same class						Observe other teachers' classes and provide feedback						Engage in joint activities across different classes and age groups[1]						Exchange teaching materials with colleagues						Engage in discussions about the learning development of specific students						Work with other teachers in this school to ensure common standards in evaluations for assessing student progress						Attend team conferences						Participate in collaborative professional learning					
	Never		Less than once a month[2]		At least once a month[3]		Never		Less than once a month[2]		At least once a month[3]		Never		Less than once a month[2]		At least once a month[3]		Never		Less than once a month[2]		At least once a month[3]		Never		Less than once a month[2]		At least once a month[3]		Never		Less than once a month[2]		At least once a month[3]		Never		Less than once a month[2]		At least once a month[3]		Never		Less than once a month[2]		At least once a month[3]	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary teachers	28	0.9	33	1.0	40	0.9	26	0.9	60	1.0	14	0.6	14	0.8	52	0.9	33	1.0	3	0.4	19	0.8	77	0.8	1	0.2	14	0.7	85	0.7	4	0.5	30	1.1	66	1.0	9	0.6	25	0.9	66	1.0	2	0.3	39	1.1	59	1.1
Lower secondary teachers	33	1.1	44	1.1	23	0.9	21	0.9	68	1.0	11	0.6	31	1.2	56	1.2	13	0.7	1	0.2	20	0.8	78	0.9	1	0.2	19	1.0	80	0.9	3	0.4	35	1.0	62	1.1	10	0.7	38	0.9	52	1.1	4	0.4	57	1.0	39	1.0

[1] For example, projects.

[2] "Less than once a month" covers to the following response options: "Once a year or less", "2-4 times a year", "5-10 times a year".

[3] "At least once a month" covers to the following response options: "1-3 times a month", "Once a week or more".

TABLE A4.2 Australian teachers' views on collaborative school climate

Results based on responses of primary and lower secondary teachers

	Percentage of teachers who "agree" or "strongly agree" with the following statements																	
	This school provides staff with opportunities to actively participate in school decisions		This school provides parents or guardians with opportunities to actively participate in school decisions		This school provides students with opportunities to actively participate in school decisions		This school has a culture of shared responsibility for school issues		There is a collaborative school culture that is characterised by mutual support		The school staff share a common set of beliefs about teaching and learning		The school staff enforces rules for student behaviour consistently throughout the school		This school encourages staff to lead new initiatives		Teachers can rely on each other	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary teachers	80	0.7	85	0.7	70	0.9	82	0.7	85	0.7	87	0.7	79	0.7	84	0.8	93	0.5
Lower secondary teachers	67	0.9	71	0.9	64	1.0	70	0.8	76	0.9	81	0.8	62	1.1	82	0.8	93	0.5

TABLE A4.3 Sources of feedback received by teachers

Results based on responses of primary and lower secondary teachers

	Percentage of teachers who have received feedback[1] from the following individuals or bodies									
	External individuals or bodies		School-level feedback		Components of school-level feedback				No feedback received in their school	
					School principal, member(s) of the school management team		Other colleagues within the school[2]			
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary teachers	34	1.0	95	0.5	83	0.8	76	0.9	4	0.5
Lower secondary teachers	34	1.0	96	0.4	75	0.9	85	0.9	3	0.4

[1] Feedback received based on any of the following methods: "Observation of my classroom teaching"; "Student survey responses related to my teaching"; "Assessment of my content knowledge", "External results of students I teach (e.g. national test scores)"; "School-based and classroom-based results (e.g. performance results, project results, test scores)"; and "Self-assessment of my work (e.g. presentation of a portfolio assessment, analysis of my teaching using video)".

[2] Other colleagues within the school who are not part of the school management team.

TABLE A4.4 Methods of feedback received by teachers

Results based on responses of primary and lower secondary teachers

	Percentage of teachers who have received feedback[1] based on the following methods											
	Observation of the teacher's classroom teaching		Student survey responses related to the teacher's teaching		Assessment of the teacher's content knowledge		External results of students the teacher teaches[2]		School-based and classroom-based results[3]		Self-assessment of the teacher's work[4]	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary teachers	87	0.6	43	1.1	47	1.1	71	0.9	79	0.9	54	1.1
Lower secondary teachers	85	0.9	55	1.0	43	1.2	76	0.8	77	0.9	52	1.1

[1] Includes teachers who have received feedback from at least one of the following individuals or bodies: "External individuals or bodies"; "School principal or member(s) of the school management team"; and "Other colleagues within the school (not a part of the school management team)".

[2] For example, national test scores.

[3] For example, performance results, project results or test scores.

[4] For example, presentation of a portfolio assessment or analysis of the teacher's teaching using video.

TABLE A4.5 Positive impact of feedback on teaching practices

Results based on responses of primary and lower secondary teachers

	Percentage of teachers who have received feedback in their school (a)		Among (a), percentage of teachers who report that the feedback they received in the 12 months prior to the survey led to a positive change in the following teaching practices											
			Knowledge and understanding of my main subject field(s)		Pedagogical competencies in teaching the teacher's subject		Use of student assessments to improve student learning		Classroom management		Methods for teaching students with special needs		Methods for teaching in a multicultural or multilingual setting	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary teachers	96	0.5	58	1.0	65	0.9	65	1.0	53	1.1	44	0.9	22	1.0
Lower secondary teachers	97	0.4	46	0.9	59	1.0	55	1.0	43	1.3	35	1.0	18	0.9

TABLE A5.1 School autonomy

Results based on responses of primary and lower secondary principals

	Percentage of principals who report that their school has the following status for the following tasks																							
	Appointing or hiring teachers						Dismissing or suspending teachers from employment						Establishing teachers' starting salaries[1]						Determining teachers' salary increases					
	Autonomous[4]		Non-autonomous[5]		Mixed[6]		Autonomous[4]		Non-autonomous[5]		Mixed[6]		Autonomous[4]		Non-autonomous[5]		Mixed[6]		Autonomous[4]		Non-autonomous[5]		Mixed[6]	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary principals	87	2.4	3	1.5	10	1.9	60	3.8	25	3.2	15	2.9	19	2.8	76	2.7	5	1.8	19	2.5	75	2.8	6	1.5
Lower secondary principals	89	3.0	4	1.5	7	2.5	70	3.7	22	3.0	8	2.1	37	5.3	59	5.1	4	1.6	40	5.0	53	5.5	7	2.8

	Percentage of principals who report that their school has the following status for the following tasks																							
	Deciding on budget allocations within the school						Establishing student disciplinary policies and procedures						Establishing student assessment policies[2]						Approving students for admission to the school					
	Autonomous[4]		Non-autonomous[5]		Mixed[6]		Autonomous[4]		Non-autonomous[5]		Mixed[6]		Autonomous[4]		Non-autonomous[5]		Mixed[6]		Autonomous[4]		Non-autonomous[5]		Mixed[6]	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary principals	92	2.3	0	0.3	7	2.3	79	3.2	3	1.9	18	2.9	48	4.6	13	2.8	40	4.0	88	2.5	1	0.6	11	2.4
Lower secondary principals	96	1.5	0	0.2	4	1.5	81	3.0	1	0.5	18	2.9	57	4.8	8	1.7	35	4.2	82	3.3	3	1.4	15	2.8

	Percentage of principals who report that their school has the following status for the following tasks																	
	Choosing which learning materials are used						Determining course content[3]						Deciding which courses are offered					
	Autonomous[4]		Non-autonomous[5]		Mixed[6]		Autonomous[4]		Non-autonomous[5]		Mixed[6]		Autonomous[4]		Non-autonomous[5]		Mixed[6]	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary principals	89	2.9	0	0.2	11	2.9	32	3.9	26	4.1	42	4.3	52	3.8	23	3.3	25	3.5
Lower secondary principals	86	2.6	0	0.2	14	2.6	47	6.4	19	4.0	34	5.6	74	4.2	3	2.5	24	3.9

[1] Including setting pay scales.

[2] Including national or regional assessments.

[3] Including national or regional curricula.

[4] "Autonomous" occurs when a significant responsibility is solely taken by at least one of the following entities: principal, other members of the school management team, teachers who are not part of the school management team or the school governing board.

[5] "Non-autonomous" occurs when a significant responsibility is solely taken by a local/regional/state/national/federal authority.

[6] "Mixed" occurs when a significant responsibility is taken by a local/regional/state/national/federal authority and by at least one of the following entities: principal, other members of the school management team, teachers who are not part of the school management team or the school governing board.

TABLE A5.2 Australian principals' school responsibilities

Results based on responses of primary and lower secondary principals

	Percentage of principals who report having a significant responsibility[1] for the following tasks											
	Appointing or hiring teachers		Dismissing or suspending teachers from employment		Establishing teachers' starting salaries[2]		Determining teachers' salary increases		Deciding on budget allocations within the school		Establishing student disciplinary policies and procedures	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary principals	94	2.0	69	3.8	14	2.0	16	2.2	95	1.9	86	3.1
Lower secondary principals	79	4.8	69	4.9	28	4.4	33	5.1	84	5.1	82	3.5

	Percentage of principals who report having a significant responsibility[1] for the following tasks									
	Establishing student assessment policies[3]		Approving students for admission to the school		Choosing which learning materials are used		Determining course content[4]		Deciding which courses are offered	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary principals	78	3.4	96	1.3	70	3.9	53	4.5	71	3.6
Lower secondary principals	63	4.9	83	3.0	30	4.6	34	5.1	72	6.7

[1] A significant responsibility is one where an active role is played in decision-making.

[2] Including setting pay scales.

[3] Including national or regional assessments.

[4] Including national or regional curricula.

TABLE A5.3 Principals' leadership activities

Results based on responses of primary and lower secondary principals

	Percentage of principals who have "often" or "very often" engaged in the following activities in their school in the 12 months prior to the survey											
	Collaborating with teachers to solve classroom discipline problems		Observing instruction in the classroom		Providing feedback to teachers based on principal's observations		Taking actions to support co-operation among teachers to develop new teaching practices		Taking actions to ensure that teachers take responsibility for improving their teaching skills		Taking actions to ensure that teachers feel responsible for their students' learning outcomes	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary principals	70	3.3	46	4.0	43	3.8	66	3.9	73	3.9	81	3.6
Lower secondary principals	49	5.8	36	5.8	36	5.0	60	6.6	76	4.6	71	5.7

	Percentage of principals who have "often" or "very often" engaged in the following activities in their school in the 12 months prior to the survey									
	Providing parents or guardians with information on the school and student performance		Reviewing school administrative procedures and reports		Resolving problems with the lesson timetable in the school		Collaborating with principals from other schools on challenging work tasks		Working on a professional development plan for the school	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary principals	78	3.5	72	3.9	29	4.0	38	3.9	70	3.9
Lower secondary principals	80	3.9	66	6.1	29	5.7	46	5.6	62	5.5

TABLE A5.4 School-community engagement in Australian schools

Results based on responses of primary and lower secondary principals

	Percentage of principals who report that the following applies to their school "quite a bit" or "a lot"							
	Parents or guardians support student achievement		Parents or guardians are involved in school activities		Students have a desire to do well in school		The school co-operates with the local community	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary principals	74	3.8	56	4.2	84	3.2	82	3.1
Lower secondary principals	77	3.8	36	5.0	75	6.1	76	5.8

TABLE A5.5 Australian principals' support

Results based on responses of primary and lower secondary principals

	Percentage of principals who "agree" or "strongly agree" with the following statements					
	I am satisfied with the support that I receive from the staff in this school		I need more support from authorities[1]		I cannot influence decisions that are important for my work	
	%	S.E.	%	S.E.	%	S.E.
Primary principals	91	2.7	63	4.0	23	2.8
Lower secondary principals	94	4.3	45	6.2	15	3.1

[1] Municipal, local, regional, state, or national authorities.

TABLE A5.6 Australian teachers' school responsibilities

Results based on responses of primary and lower secondary principals

	Percentage of principals who report that teachers[1] have a significant responsibility[2] for the following tasks											
	Appointing or hiring teachers		Dismissing or suspending teachers from employment		Establishing teachers' starting salaries[3]		Determining teachers' salary increases		Deciding on budget allocations within the school		Establishing student disciplinary policies and procedures	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary teachers	13	2	0	0	0	0.1	0	0.4	12	2.1	49	4.1
Lower secondary teachers	7	1.3	0	0	0	0	1	0.6	8	2.9	35	4.4

	Percentage of principals who report that teachers[1] have a significant responsibility[2] for the following tasks									
	Establishing student assessment policies[4]		Approving students for admission to the school		Choosing which learning materials are used		Determining course content[5]		Deciding which courses are offered	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary teachers	48	3.5	2	0.8	76	3.2	48	4.4	32	3.3
Lower secondary teachers	36	5.8	4	2.5	87	2.8	62	5	33	4.6

[1] Excluding teachers represented on the school management team.

[2] A significant responsibility is one where an active role is played in decision-making.

[3] Including setting pay scales.

[4] Including national or regional assessments.

[5] Including national or regional curricula.

TABLE A5.7 Teachers' autonomy

Results based on responses of primary and lower secondary teachers

	Percentage of teachers who "agree" or "strongly agree" that they have control over the following areas[1]									
	Determining course content		Selecting teaching methods		Assessing students' learning		Disciplining students		Determining the amount of homework to be assigned	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
Primary teachers	72	1.0	94	0.6	89	0.8	94	0.6	78	0.9
Lower secondary teachers	73	1.0	96	0.3	87	0.8	93	0.5	93	0.6

[1] These data are reported by teachers and refer to a randomly chosen class they currently teach from their weekly timetable.

TABLE A5.8 Teachers' actions towards achieving academic excellence

Results based on responses of primary and lower secondary principals

	Percentage of principals who report that the following statements apply "quite a bit" or "a lot" to their school					
	Teachers understand the school's curricular goals		Teachers succeed in implementing the school's curriculum		Teachers hold high expectations for student achievement	
	%	S.E.	%	S.E.	%	S.E.
Primary principals	89	2.9	90	2.4	82	3.3
Lower secondary principals	84	5.7	90	4.6	87	4.6

TABLE A5.9 Australian teachers' view of the way different stakeholders value the profession

Results based on responses of primary and lower secondary teachers

	Percentage of teachers who "agree" or "strongly agree" with the following statements					
	Teachers' views are valued by policy makers in this country/region		Teachers can influence educational policy in this country/region		Teachers are valued by the media in this country/region	
	%	S.E.	%	S.E.	%	S.E.
Primary teachers	25	0.9	29	1.0	32	0.9
Lower secondary teachers	29	1.1	34	1.1	33	1.2